# XDS-100

## Installation manual

R9898490

R59770507/03
20/10/2010

BARCO

Visibly yours

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Printed in Belgium

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| 印制电路配件<br>Printed Circuit Assemblies | x | 0 | x | 0 | 0 | 0 |
| 电(线)缆<br>Cables | x | 0 | x | 0 | 0 | 0 |
| 底架<br>Chassis | x | 0 | x | 0 | 0 | 0 |
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Image -1

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# 1. SAFETY INSTRUCTIONS

### About this chapter

It is necessary to read this chapter prior to starting any activity on the device. It contains valuable and critical information to ensure safety of the operator, other people in the neighborhood of the device.

### Overview

- Notice on safety
- Installation instructions
- Owner's record
- Warnings
- Plug types
- Heat and fire hazard
- Installation
- Prevent personal injury
- Device damage
- Environment condition check
- Service
- Cleaning
- Repacking

## 1.1 Notice on safety

### Notice on Safety

This equipment is built in accordance with the requirements of the international safety standards IEC60950-1, EN60950-1, UL60950-1 and CAN/CSA - C22.2 No.60950-1, which are the safety standards of information technology equipment including electrical business equipment. These safety standards impose important requirements on the use of safety critical components, materials and isolation, in order to protect the user or operator against risk of electric shock and energy hazard, and having access to live parts. Safety standards also impose limits to the internal and external temperature rises, radiation levels, mechanical stability and strength, enclosure construction and protection against the risk of fire. Simulated single fault condition testing ensures the safety of the equipment to the user even when the equipment's normal operation fails.

## 1.2 Installation instructions

### Installation Instructions

- Before operating this equipment please read this manual thoroughly, and retain it for future reference.
- Installation and preliminary adjustments can be performed after reading the documentation manuals in detail.
- All warnings on the device and in the documentation manuals should be adhered to.
- All instructions for operating and use of this equipment must be followed precisely.

## 1.3 Owner's record

### Owner's Record

The part number and serial number can be found on the label at the back side of the device. Record these numbers in the table below. Refer to them whenever you call your Barco dealer regarding this product.

| | |
|---|---|
| Part Number: | |
| Serial Number: | |
| Dealer: | |

## 1.4 Warnings

### Safety warnings

- To prevent fire or electrical shock hazard, do not expose this equipment to rain or moisture!
- This product should be operated from an AC power source. Power input is auto-ranging from 100 V to 240 V.
- All equipment in the system is equipped with a 3-wire grounding plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- If an extension cord is used with this product, make sure that the total of the Ampere ratings on the products plugged into the extension cord does not exceed the extension cord Ampere rating.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock.
- Never spill liquid of any kind on the product. Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified service personnel before resuming operations.
- Lightning - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the device due to lightning and AC power-line surges.

## 1.5 Plug types

**WARNING: This apparatus must be grounded (earthed) via the supplied 3 conductor AC power cable. If the supplied power cable is not the correct one, consult your dealer.**

### Plug types

**a. Mains lead (AC Power cord) with CEE 7 plug up to 16 A**

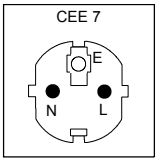


Image 1-1

The colors of the mains lead are colored in accordance with the following code:

Green + yellow: Earth (Ground)

Blue: Neutral

Brown: Line (Live)

**b. Power cord with NEMA 5/15 plug up to 15 A**

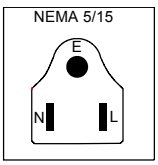


Image 1-2

The wires of the power cord are colored in accordance with the following code.

Green or yellow + green: Earth (Ground)

Blue or white: Neutral

Brown or black: Line (Live)

## 1.6 Heat and fire hazard

### Heat and Fire Hazard

Warning – risk of fire: do not place flammable or combustible materials near the device!

Barco products are designed and manufactured to meet the most stringent safety regulations.

This device radiates heat on its external surfaces and from ventilation ducts during normal operation, which is both normal and safe. Exposing flammable or combustible materials into close proximity of this device could result in the spontaneous ignition of that material, resulting in a fire. For this reason, it is absolutely necessary to leave an “exclusion zone” around all external surfaces of the device where no flammable or combustible materials are present. The exclusion zone must be not less than 40 cm (16”) for all Barco devices. Do not cover the device or the lens with any material while the it is in operation.

Keep flammable and combustible materials away from the device at all times.

Mount the device in a well ventilated area away from sources of ignition and out of direct sun light.

Never expose the device to rain or moisture.

In the event of fire, use sand, CO2, or dry powder fire extinguishers; never use water on an electrical fire.

Always have service performed on this device by authorized Barco service personnel.

Always insist on original Barco replacement parts. Never use non-Barco replacement parts as they may degrade the safety of this device.

Slots and openings in the cabinet and the sides are provided for ventilation; to ensure reliable operation of the device and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.

This device should never be placed near or over a radiator or heat register, nor should it be placed in a built-in installation or enclosure unless proper ventilation is provided.

Rooms must be well ventilated or cooled in order to avoid build up of heat.

## 1.7 Installation

### Safety On Installation

- Do not place this equipment on an unstable cart, stand, or table. The product may fall, causing serious damage to it.
- Do not use this equipment near water.
- Only use the power cord supplied with your device. While appearing to be similar, other power cords have not been safety tested at the factory and may not be used to power the device. For a replacement power cord, contact your dealer.
- Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, nor should it be placed in a built-in installation or enclosure unless proper ventilation is provided.
- Do not block the device’s cooling fans or free air movement around the device. Loose papers or other objects may not be nearer to the device than 10 cm (or 4") on any side.
- Always ensure the working load limit of the structure supporting the device.

## 1.8 Prevent personal injury

### To prevent personal injury

To prevent injuries and physical damage, always read this manual and all labels on the system before connecting to the wall outlet.

To prevent injuries, take note of the weight of the device.

Before attempting to remove any of the device’s covers, you must turn off the device and disconnect from the wall outlet.

## 1.9 Device damage

### To prevent device damage

In order to ensure that correct airflow is maintained, and that the device complies with Electro-Magnetic Compatibility requirements, it should always be operated with all of it’s covers in place.

Ensure that nothing can be spilled on, or dropped inside the device. If this does happen, switch off and unplug the mains supply immediately. Do not operate the device again until it has been checked by qualified service personnel.

The device must always be mounted in a manner which ensures free flow of air into its air inlets and unimpeded evacuation of the hot air exhausted from its cooling system. Heat sensitive materials should not be placed in the path of the exhausted air.

## 1.10 Environment condition check

### Environment condition check

A device must always be mounted in a manner which ensures the free flow of clean air into the device's ventilation inlets. For installations in environments where the device is subject to excessive dust, then it is highly advisable and desirable to have this dust removed prior to it reaching the device clean air supply. Devices or structures to extract or shield excessive dust well away from the device are a prerequisite; if this is not a feasible solution then measures to relocate the device to a clean air environment should be considered.

It is the clients responsibility to ensure at all times that the device is protected from the harmful effects of hostile airborne particles in the environment of the device. The manufacturer reserves the right to refuse repair if a device has been subject to negligence, abandon or improper use.

### Ambient temperature conditions

Max. ambient temperature : +40°C or 104°F

Min. ambient temperature : 10°C or 51°F

Storage temperature: -35°C to +65°C (–31°F to 149°F)

### Humidity Conditions

Storage: 0 to 98% relative humidity, non-condensing

Operation: 0 to 95% relative humidity, non-condensing

### Environment

Do not install the device in a site near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity. Be aware that room heat rises to the ceiling; check that temperature near the installation site is not excessive.

### Environment condition check

The device must always be mounted in a manner which ensures the free flow of clean air into the air intake and out of the air outlet.

## 1.11 Service

### Safety On Servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage potentials and risk of electric shock!

Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power cord or plug is damaged or frayed.
- If liquid has been spilled into the equipment.
- If the product has been exposed to rain or water.
- If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of the other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
- If the product has been dropped or the cabinet has been damaged.
- If the product exhibits a distinct change in performance, indicating a need for service.
- Replacement parts: When replacement parts are required, be sure the service technician has used original BARCO replacement parts or authorized replacement parts which have the same characteristics as the BARCO original part. Unauthorized substitutions may result in degraded performance and reliability, fire, electric shock or other hazards. Unauthorized substitutions may void warranty.
- Safety check: Upon completion of any service or repairs to this device, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

## 1.12 Cleaning

### Safety On Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with mild detergent solution. Never use strong solvents, such as thinner or benzine, or abrasive cleaners, since these will damage the cabinet.

## 1.13 Repacking

### On Repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your equipment. For maximum protection, repack your set as it was originally packed at the factory.

# 2. COMPLIANCY

## 2.1 EMC compliancy

### Introduction

To meet the EMC compliancy, it is required to make some precautions. These precautions are listed in the blocks below.

### The presence of EMC finger clips

EMC finger clips are installed on the edges of the blank input covers and on the input module cover. These EMC finger clips must be present at all times. When installing a new input board in layer 1, make sure that an EMC finger clip is installed on the lower edge of its cover plate.

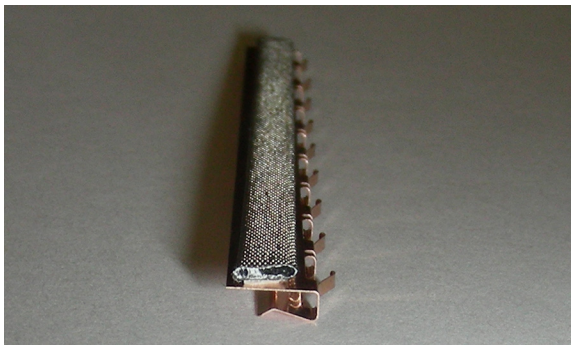

Image 2-1
EMC finger clip

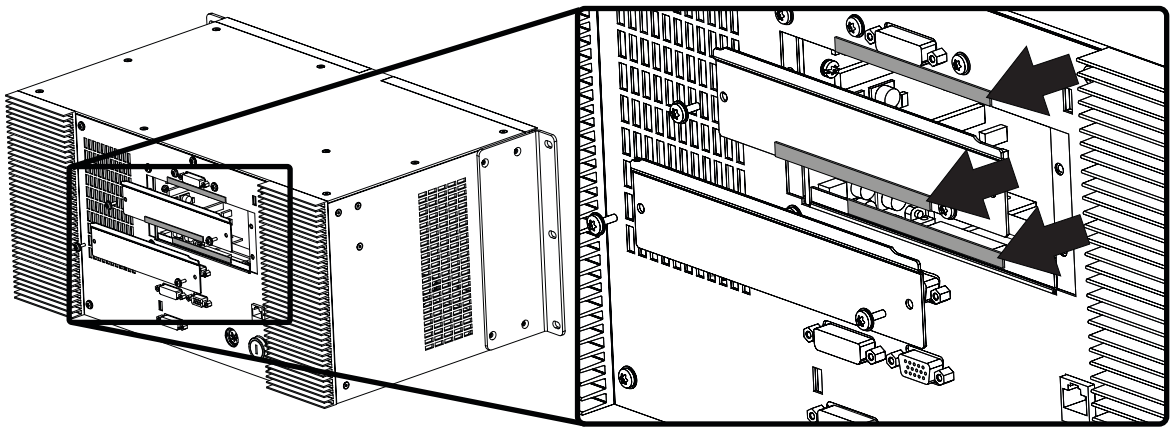

Image 2-2
EMC finger clips

### The use of a shielded Network cable (Cat5)

A shielded Network cable must be used when connecting the device to a network.

# 3. INTRODUCTION

### Overview

- About this manual
- Symbols and fonts

## 3.1 About this manual

### About this manual

This manual describes the XDS-100 system:

- installation of the XDS-100 and its peripherals: see sections "Packaging", page 15, *"Facility and system requirements", page 19*, *"Specifications", page 21*, "Physical installation", page 25
- configuration and settings: see sections "Network configuration", page 39
- getting started and basic operation: see section "Getting started", page 47
- XDS Control Center software: see sections "Getting started", page 47
- maintenance and service: see section "Maintenance and service", page 99
- the on screen display or menu (OSD): see sections "Getting started", page 47, "Maintenance and service", page 99
- OSD (On Screen Display): see appendix *"OSD (On Screen Display)", page 117* and "XDS-100 advanced settings", page 63
- RCU (Remote Control Unit): see appendix "RCU Control", page 111

At the top of each chapter, a small introduction includes the interpretation of the **content** of the chapter.

## 3.2 Symbols and fonts

### Symbol overview

The following icons are used in the manual :

| | |
|---|---|
| | Caution |
| | Warning |
| | Hot surface |
| | ESD sensitive |
| | Consult another document (User guide, Operation manual...) |
| | Info, term definition. General info about the term |
| | Note: gives extra information about the described subject |
| | Tip: gives extra advice about the described subject |

## Font overview

- Buttons are indicated in bold, e.g. **OK**.
- Menu items are indicated in *italic*.
- Step related notes, tips, warnings or cautions are printed in *italic*.
- Procedure related notes, tips, warnings or cautions are printed in **bold** between 2 lines preceded by the corresponding icon.

# 4. PACKAGING

### About this chapter

This chapter provides an overview of what is in the box and how to unpack.

### Overview

- Content
- Unpacking
- RCU battery installation

## 4.1 Content

### Content

Carefully check if everything is present and intact. In case of a damaged unit, contact Barco nv. Never use a damaged unit (e.g. XDS-100, power cord, power adaptor, RCU).

| Description | Article number | Quantity |
|---|---|---|
| XDS-100 | - | 1 |
| Remote control unit (RCU) + 2 batteries | R764277K | 1 |
| 12 VDC power adaptor | - | 1 |
| Power cord (connectors C13 and NEMA 5–15) | - | 1 |
| Power cord (connectors C13 and CEE7) | - | 1 |
| Rack mount brackets | - | 2 |
| Soft adhesive pads (feet) | - | 4 |
| Quick start guide | R59770503 | 1 |
| Installation manual | R59770507 | 1 |

## 4.2 Unpacking

### Packaging

Cardboard boxes and foam are used to protect the devices during shipping.

**Save the original packaging for future shipment. For maximum protection while shipping the unit, always pack it as it was packed during first delivery.**

### How to unpack the XDS-100?

1. Carefully cut the tape on the top lid of the box
   ***Warning:*** *Follow the relevant safety precautions while using a knife.*
2. Open the box and lift out the content.

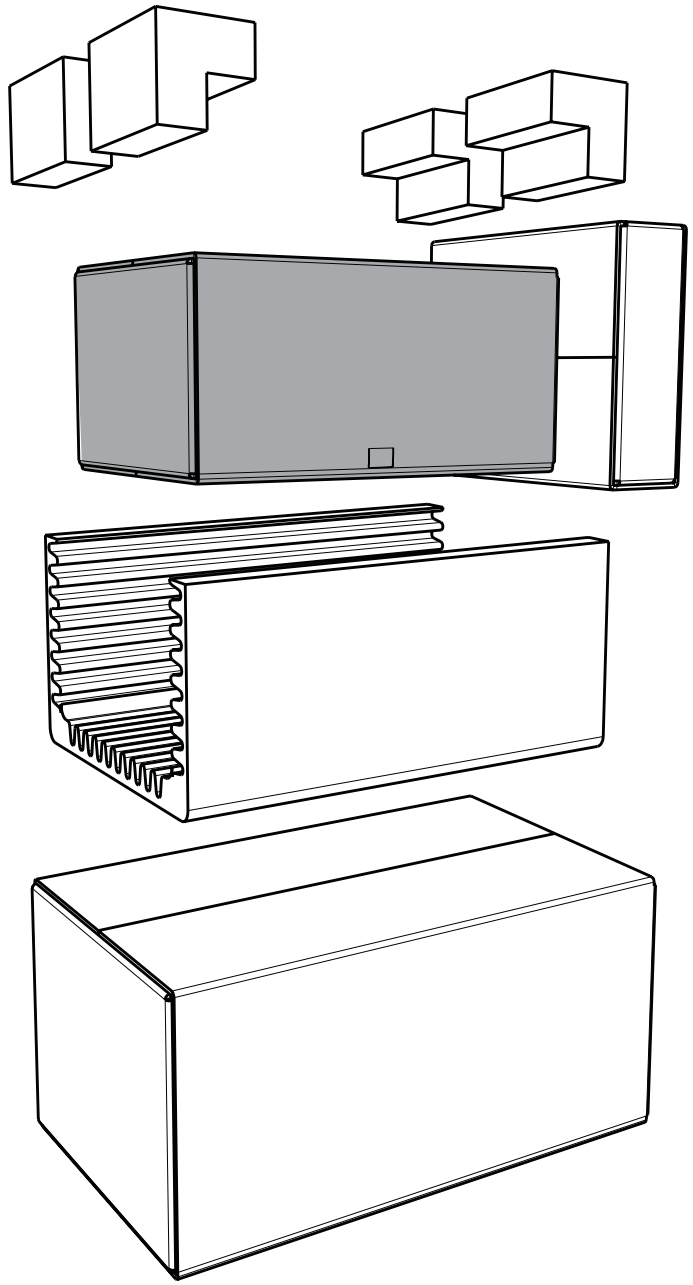

Image 4-1
XDS-100:unpacking the unit

## 4.3 RCU battery installation

### Where to find the batteries for the remote control ?

The batteries are not placed in the remote control unit to avoid control operation in its package, resulting in a shorter battery life time. At delivery the batteries can be found in a separated bag attached to the remote control unit. Before using your remote control, install the batteries first.

### How to install the batteries in the remote control ?

1. Push the battery cover tab a little backwards (1) while pulling the cover upwards (2).

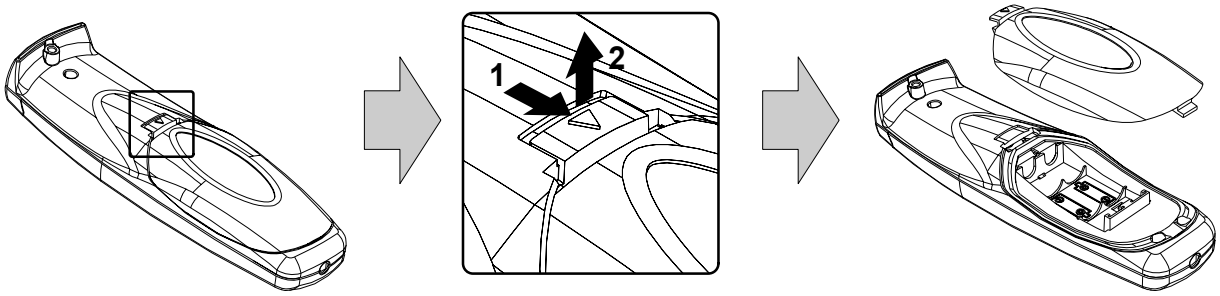


Image 4-2

2. Insert the two AA size batteries, making sure the polarities match the + and - marks inside the battery compartment.

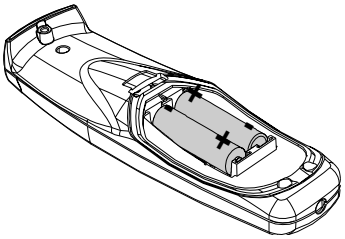

Image 4-3

3. Insert (1) the lower tab of the battery cover in the gap at the bottom of the remote control, and press (2) the cover until it clicks in place.

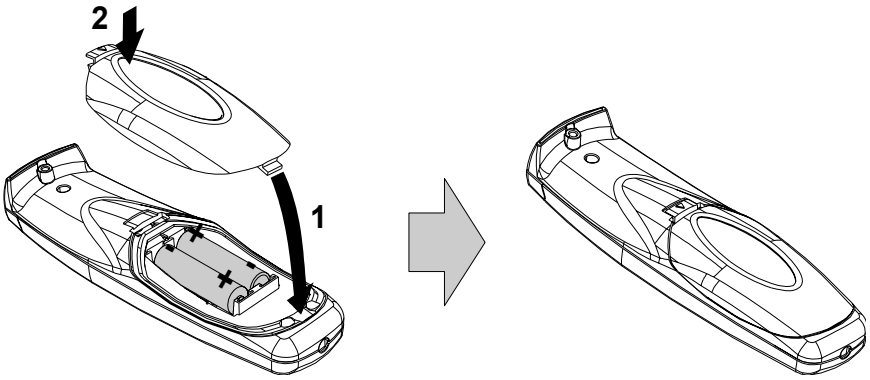


Image 4-4

## To prevent battery explosion

- Danger of explosion if battery is incorrectly installed.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Always replace both batteries at the same time
- Never use an old and a new battery to together in the device
- Disposal of used batteries must be done according to the manufacturer’s instruction.

# 5. FACILITY AND SYSTEM REQUIREMENTS

### About this chapter

This chapter provides information about the installation requirements such as temperature, humidity, dimensions, power net, safety area around the device. Also the air intake and air outlet area of the device are considered.

Next to that the minimum system requirements for the Desktop generating PC are listed.

### Overview

- Environmental requirements
- Dimensions
- Installation requirements
- Minimum system requirements

## 5.1 Environmental requirements

### Ambient temperature conditions

Max. ambient temperature : +40°C or 104°F

Min. ambient temperature : +10°C or 50°F

Storage temperature: -35°C to +65°C (–31°F to 149°F)

### Humidity Conditions

Storage: 0 to 98% relative humidity, non-condensing

Operation: 0 to 95% relative humidity, non-condensing

### Environment

Do not install the device in a site near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity. Be aware that room heat rises to the ceiling; check that temperature near the installation site is not excessive.

### Environment condition check

The device must always be mounted in a manner which ensures the free flow of clean air into the air intake and out of the air outlet.

## 5.2 Dimensions

### Dimensions

The XDS-100 is 19” rack mount, 4.6U

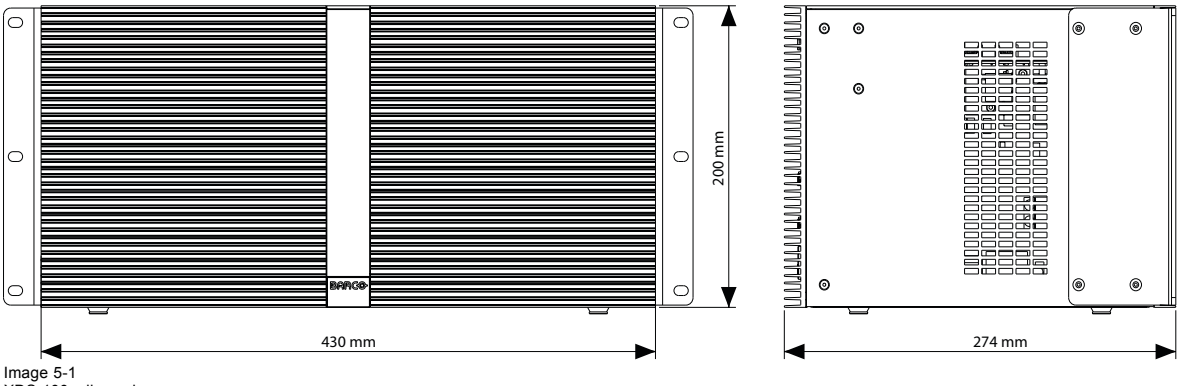


Image 5-1
XDS-100: dimensions

## 5.3 Installation requirements

### Air flow guidelines

The air intake is at the back side of the device, the air outlet is at the left side. It is important to keep the back area unblocked. A free area of at least 40 cm should be available at the back side of the device.

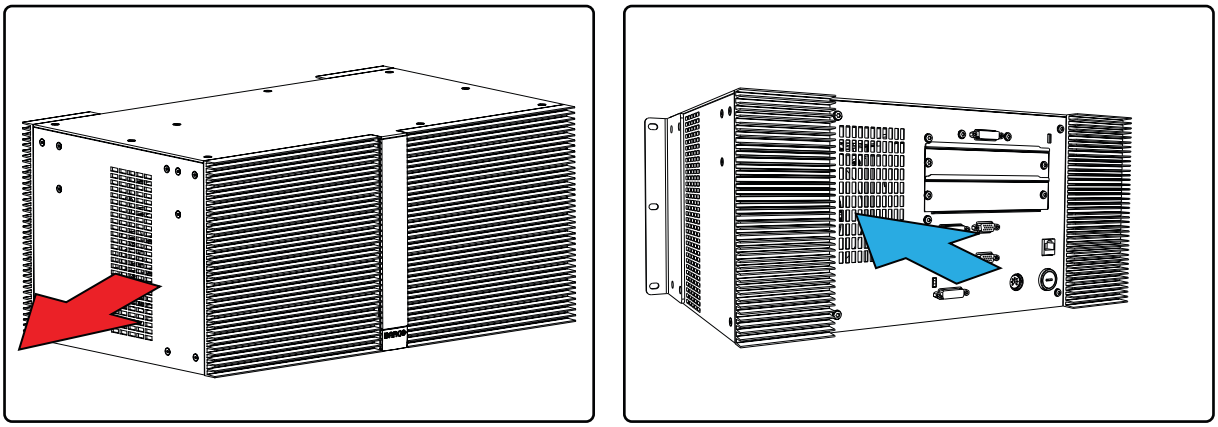

Image 5-2
Air intake and air outlet

### Rack mount

The device is 19” rack mount, 4.6U.

Installation of the rack mount brackets, which are delivered with the XDS-100 device, is explained in "Rack mount brackets", page 121.

### Table mount

In the case where the XDS-100 is installed on a table (or similar), four soft adhesive pads can be stuck to the bottom side of the device to prevent it from scratching the surface on which it is installed. See "Soft adhesive feet", page 123.

## 5.4 Minimum system requirements

### Minimum requirements for the Desktop generating PC

The minimum system requirements for installing the XDS CC software are:

- **Operating system:** Windows XP, Windows Vista or Windows 7
- **Processor:** Preferably Dual Core Processor 500 MHz or more performant
- **Memory:** 2 GB or more
- **Ethernet card:** 100 MBit LAN
- **Hard Disk:** 40 GB or more
- **Graphics card:** DVI out , 1920x1080@60Hz or 1920x1200@60Hz

It is important that the Desktop generating PC graphics card has the following settings:

- **Single** display or **Clone** (same image on both screens)
- **Desktop color settings** of the graphics card must be default
- **Color quality** must be set to 32 bit or Highest

# 6. SPECIFICATIONS

### About this chapter

This chapter includes the general specifications of the XDS-100. Next to that, specifications that are required for input signals and output signal are mentioned as well. Signals that don't meet these specifications may not be displayed in a good way.

### Overview

- General specifications
- Input specifications
- Image processing
- Output specification

## 6.1 General specifications

### General specifications

| | |
|---|---|
| Compatibility | Depending on the input box population:<br>• All current video sources (PAL, SECAM, NTSC) in Composite, S-VHS, Component or RGB formats<br>• All currently proposed HDTV, extended and improved television standards (1080i, 720p)<br>• Electronic work stations with a resolution up to 1920 x 1200 pixels at 60 Hz<br>• DVI sources with a pixel clock up to 165 MHz<br>• Analog sources with a pixel clock up to 270 MHz |
| Inputs (standard) | **Standard inputs**<br>• Desktop input: DVI single link (DVI-D)<br>• Source input (2x): DVI single link (DVI-D) + analog (D–sub 15) |
| Inputs (optional) | **Optional inputs**<br>• Source input: analog input (RGB (5 BNC) + Video (1 BNC) + S–Video (1 mini-DIN 3–pin)<br>• Source input: SDI / HDSDI (2 x 2 BNC) |
| Output | Desktop output: DVI single link (DVI-D) |
| Output format | HDTV 1920 x 1080 @ 60 Hz or WUXGA 1920 x 1200 @ 60 Hz |
| IR receiver | 2 IR receivers built in: one at the front side, one at the back side |
| Communication | • RCU (Remote Control Unit)<br>• Switch to select the resolution: HDTV 1920 x 1080 @ 60 Hz or WUXGA 1920 x 1200 @ 60 Hz<br>• Ethernet communication: see *Network connection* |
| Network connection | 10/100 Base-T, RJ-45 connection |
| Electromagnetic interference | Complies with FCC rules & regulations, part 15 Class A and CE EN55022 Class A |
| Mains voltage | 100–240V / 50–60 Hz |
| Power consumption | 90 W |
| Heat dissipation | 306 BTU/h |
| Picture in picture | 4 sources simultaneously (depending on the input box population) |
| Dimensions | See "Dimensions", page 19 |
| Weight | 6.78 kg (without packaging); 11.76 kg (with packaging) |

## 6.2 Input specifications

### Overview

- Desktop input
- DVI single link + analog input layer
- Analog input layer
- SDI/HDSDI input layer

### 6.2.1 Desktop input

#### DVI single link desktop input

**DVI-D connector**

- DVI single link
- Pixel clock max. 165 MHz
- 1920 x 1080 @ 60 Hz or 1920 x 1200 @ 60 Hz
- Equalizer present
- Cable length max. 15 m (copper cable)
- Analog pins are not supported

### 6.2.2 DVI single link + analog input layer

#### DVI single link + analog input layer

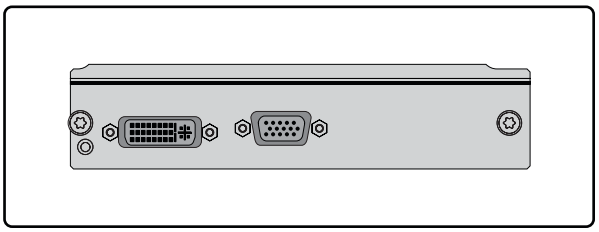

Image 6-1
DVI single link + analog

**DVI-D connector**

- DVI single link
- Pixel clock max. 165 MHz
- Up to 1920 x 1200 @ 60 z
- No equalizer
- Cable length max. 3 m (copper cable)
- Analog pins are not supported

**D–sub 15 connector**

- Analog RGB signal
- Pixel clock max. 270 MHz

**Only one of the two inputs can be displayed simultaneously!**

### 6.2.3 Analog input layer

#### Analog input layer

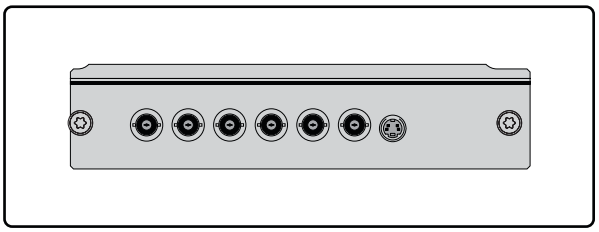

Image 6-2
Analog input

**Analog 5 BNC**

- RGB HS/VS: Red channel, Green channel, Blue channel, Horizontal sync, Vertical sync
- RGBS: Red channel, Green channel, Blue channel, Composite sync
- RGsB: Red channel, Green channel + sync, Blue channel
- YUV: component video
- Automatic mode and sync detect
- Pixel clock max. 270 MHz
- Can receive 1920 x 1200 @ 90Hz

**Video 1 BNC**

- Video: PAL, NTSC, SECAM

**S-Video 1 mini-DIN 3-pin**

- S-Video

**Both the RGB (or YUV) and the Video (or S-Video) signal can be displayed simultaneously!**

### 6.2.4 SDI/HDSDI input layer

#### SDI/HDSDI input layer

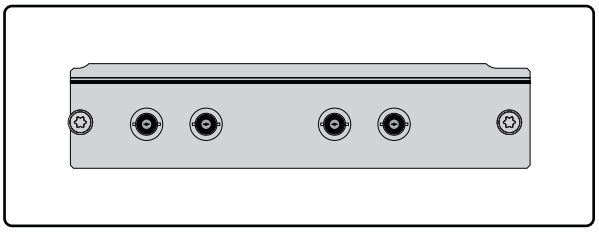

Image 6-3
SDI/HDSDI input

**SDI//HDSDI 2 x 2 BNC**

- 2x input (left two connectors)
- 2x output, which is a loop through of the selected input (right two connectors)

**Only one of the two inputs can be displayed simultaneously!**

## 6.3 Image processing

### Image processing

- Picture-in-picture: max. 4 windows
- Bit depth: 8 bit/color
- Deinterlacing: 1 deinterlacer for all 4 input sources
- AMDS functionality (Line time measurement and number of lines)
- APA functionality (Total pixels, start pixel, active pixels, total lines, start line, active lines, phase)
- Adjustment per window:
  - Input balance on analog RGB data sources
  - Color temperature
  - Contrast, brightness, gamma
  - Sharpness, color, hue (NTSC) on video

**The XDS CC software is needed to create Picture-in-pictures.**

## 6.4 Output specification

### DVI single link output

Output can be chosen through the switch: HDTV (1920 x 1080 @ 60 hz) or WUXGA (1920 x 1200 @ Hz)

- Pixel clock for HDTV ( HDTV 1080p timings): 148.5 MHz
- Pixel clock for WUXGA (CVT-RB timings): 154 MHz

# 7. PHYSICAL INSTALLATION

### About this chapter

This chapter describes the physical setup of the XDS-100. Depending on the available hardware and on the wishes of the user, a choice can be made between four different levels of installation, however it is advised to choose the **Standard setup** (or the Advanced setup)

The four installation levels are:

- **Elementary setup:** the lowest level setup without Desktop generating PC (no XDS Control Center software !). This implies that only one source can be displayed at a time. The selected source is displayed full-screen. Control of the system is done through RCU / OSD only.
- **Basic setup:** a Desktop generating PC runs the XDS Control Center software. It is directly connected to the XDS-100 in a point-to-point network (cross-type Ethernet cable). Sources and layouts are now controlled via the XDS Control Center software.
- **Standard setup (= ADVISED SETUP):** in this setup, the XDS-100 and the Desktop generating PC are connected to a network switch (a local area network), that is also connected to the corporate LAN and to which additional devices (e.g. laptop, PC, DVI image generator ... ) can be connected. XDS Client software can be installed on those devices to enable some powerful features, such as Network Desktop Sharing, Remote Keyboard/Mouse (DVI image generators), Remote Control Center, Remote Administration Center...
- **Advanced setup:** in the highest level setup, one can also connect an Audio switcher and/or a Video Conference System to the XDS-100 and fully control it through the XDS Control Center software.

### Overview

- Elementary setup
- Basic setup
- Standard setup
- Advanced setup

## 7.1 Elementary setup

### Overview

- Description of the elementary setup
- Connections

### 7.1.1 Description of the elementary setup

### Description

A typical **elementary setup** consists of the following parts:

- XDS-100
- Image generators (sources)
- Display

The sources and the Display are connected to the XDS-100,

### Connection diagram

In this example, a workstation (DVI single link) and a laptop (analog) are connected to the input connectors of the XDS-100. The source to be displayed on the Display can be selected using the RCU.

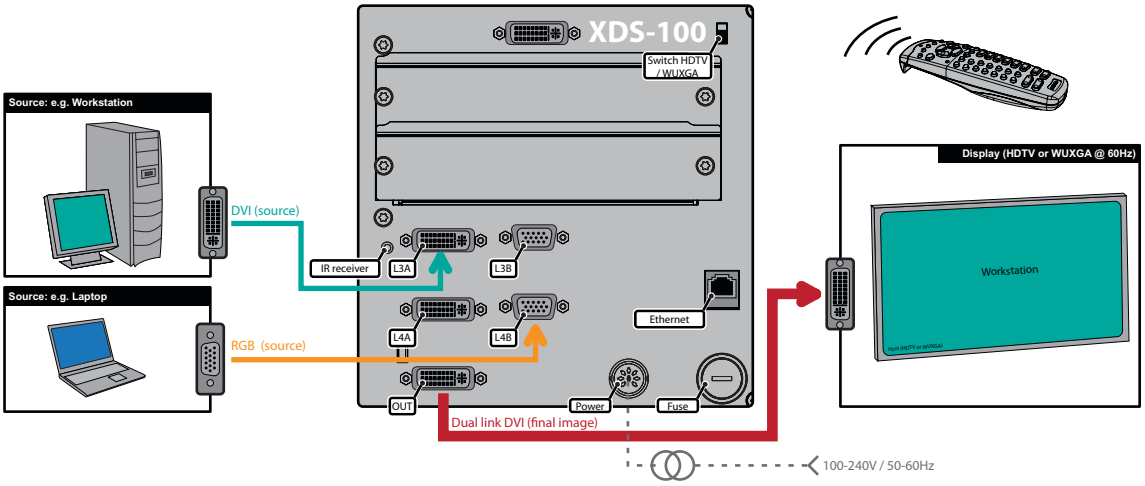


Image 7-1
XDS-100: elementary setup

## 7.1.2 Connections

### XDS-100 connections

1. Connect a source (e.g. image generator, workstation, laptop, camera ...) to one of the connectors of an input layer of the XDS-100

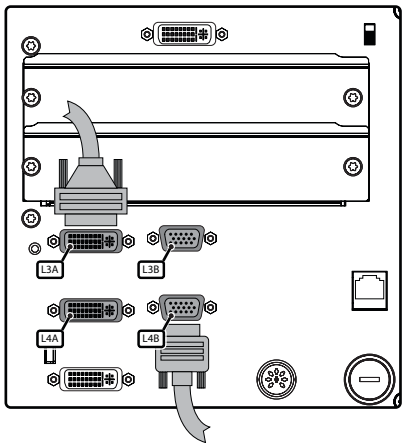


Image 7-2
Source connectors

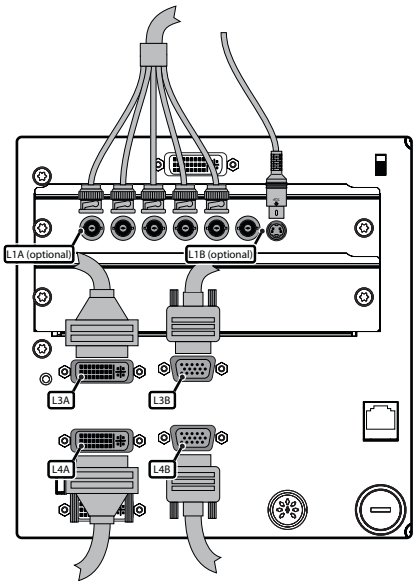


Image 7-3
Source connectors: other example

2. Repeat the previous step for each source to be connected
3. Connect the output connector to the Display (e.g. flat screen, projector ...)

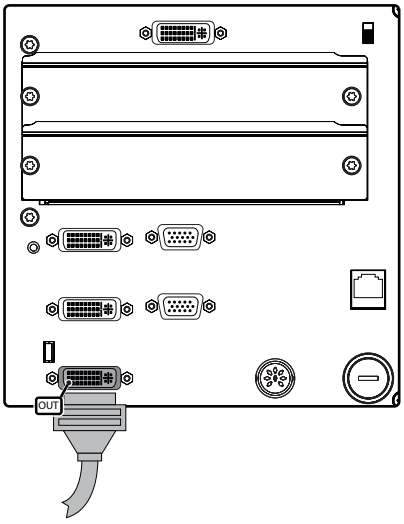


Image 7-4
Output connector

4. Connect the 8–pin DIN plug of the power supply to the power connector on the XDS-100

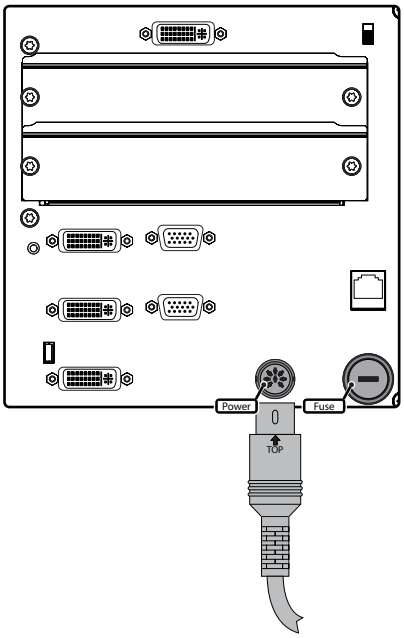


Image 7-5
Power plug

5. Connect the power cable to both the power supply and the wall outlet

**CAUTION: Only use the original power supply and power cables.**

**CAUTION: Do not use power supplies or power cables that are damaged. Replace it by a new original one.**

## 7.2 Basic setup

### Overview

- Description of the basic setup
- Connections

## 7.2.1 Description of the basic setup

### Description

A typical **basic setup** consists of the following parts:

- XDS-100
- Desktop generating PC
- Image generators (sources)
- Display

The Desktop generating PC, the sources and the Display are connected to the XDS-100,

### Connection diagram

The Desktop generating PC is running the XDS CC software and sends its desktop to the XDS-100 Desktop input. In this example, a workstation (DVI single link), a laptop (analog RGB) and a camera (S-video) are connected to the input connectors of the XDS-100. The sources and layouts to be displayed on the Display can be selected using the XDS CC software user interface.

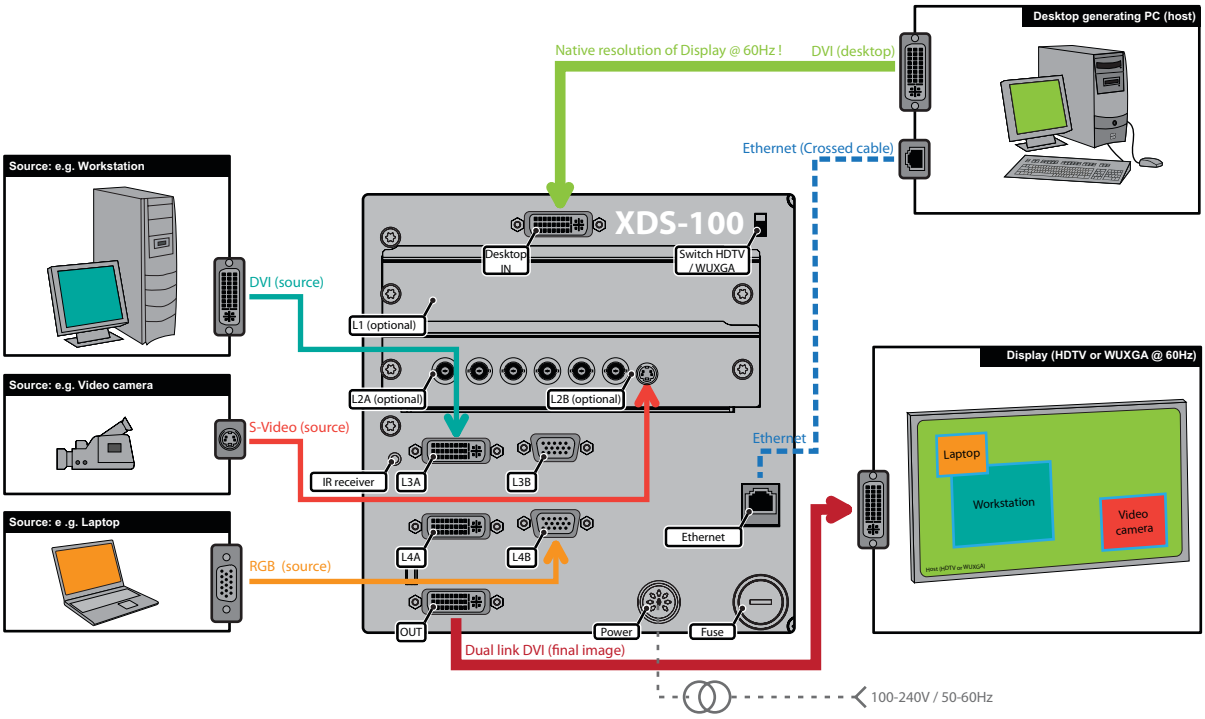


Image 7-6
XDS-100: basic setup

## 7.2.2 Connections

### XDS-100 connections

1. Connect the source (e.g. image generator, workstation, laptop, camera ...) to one of the connectors of an input layer of the XDS-100

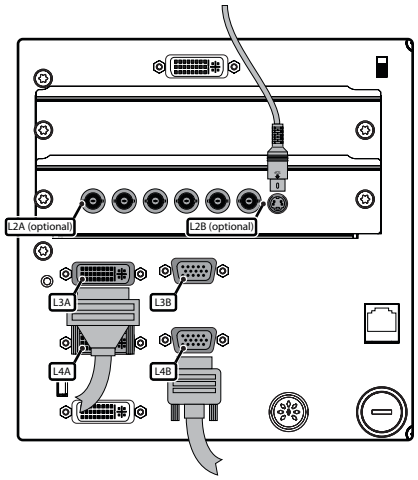


Image 7-7
Source connectors

2. Repeat the previous step for each source to be connected
3. Connect the data output of the Desktop generating PC to the Desktop input connector on the XDS-100
   ***Note:*** *The signal must be single link DVI and it must have the same resolution of the display wall. Only HDTV or WUXGA are accepted. Vertical refresh rate must be 60 Hz.*

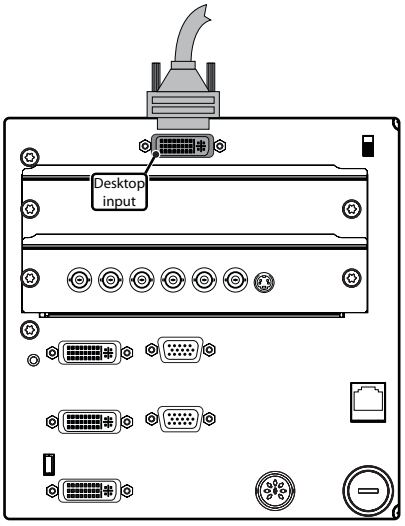


Image 7-8
Desktop input connector

4. Connect the network card or the Desktop generating PC to the Ethernet connector on the XDS-100
   ***Note:*** *In this configuration, a cross-type Ethernet cable must be used.*

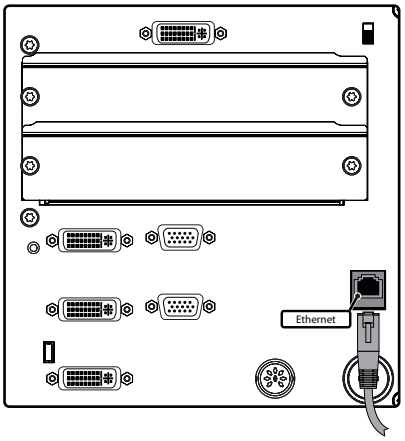


Image 7-9
Ethernet connector

5. Connect the output connector to the Display (e.g. flat screen, projector ...)

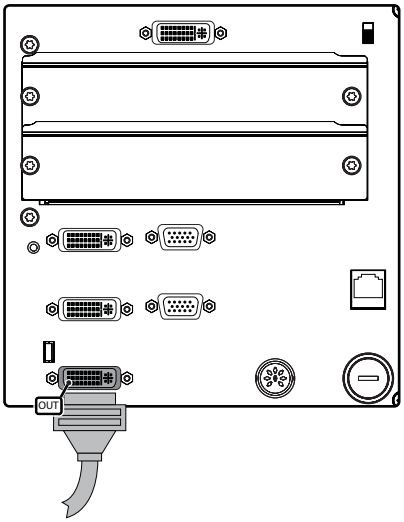


Image 7-10
Output connector

6. Connect the 8-pins DIN plug of the power supply to the power connector on the XDS-100.

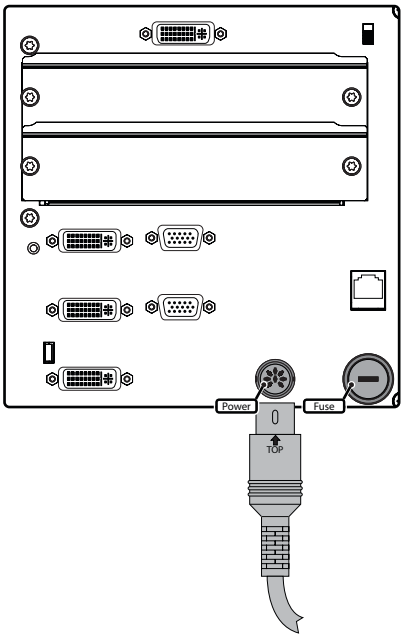


Image 7-11
Power plug

7. Connect the power cable to both the power supply and the wall outlet

**CAUTION: Only use the original power supply and power cables.**

**CAUTION: Do not use power supplies or power cables that are damaged. Any damaged item must be replaced by a new original one.**

## 7.3 Standard setup

### Overview

- Description of the standard setup
- Connections

## 7.3.1 Description of the standard setup

### Description

A typical **standard setup** consists of the following parts:

- XDS-100
- Desktop generating PC
- Network switch
- Image generators (sources)
- Remote desktop sharing computers
- Display

The Desktop generating PC, the sources and the Display are connected to the XDS-100,

### Connection diagram

The Desktop generating PC is running the XDS CC software and sends its desktop to the XDS-100 Desktop input. A workstation (DVI single link), a laptop (analog RGB) and a camera (S-video) are connected to the input connectors of the XDS-100. The Desktop generating PC and the XDS-100 are connected to the same network switch, which is also connected to the corporate LAN (optional). A remote desktop sharing computer is connected to the same corporate LAN.

The sources (both hard wired and remote) and layouts to be displayed on the Display can be selected using the XDS CC software user interface.

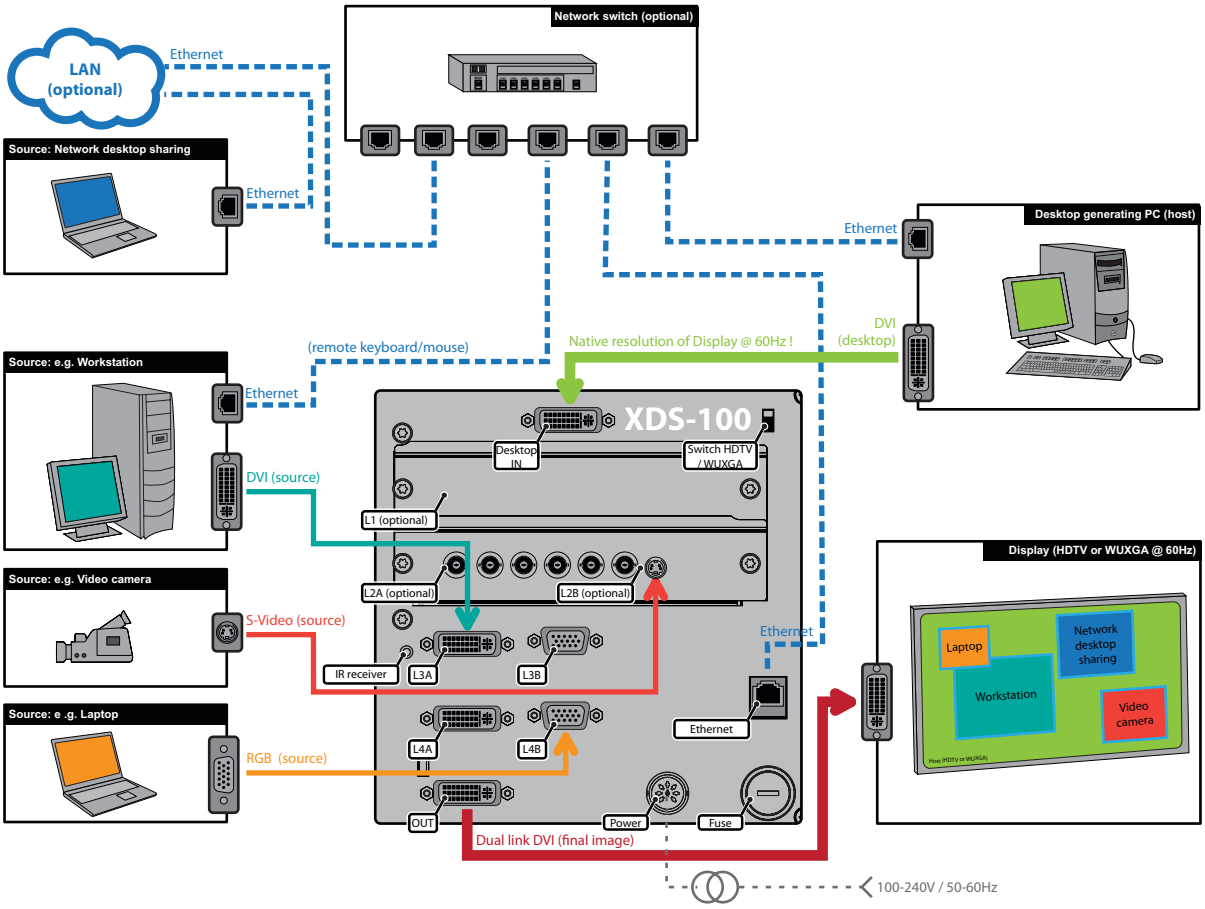


Image 7-12
XDS-100: standard setup

## 7.3.2 Connections

### XDS-100 connections

1. Connect the source (e.g. image generator, workstation, laptop, camera ...) to one of the connectors of an input layer of the XDS-100

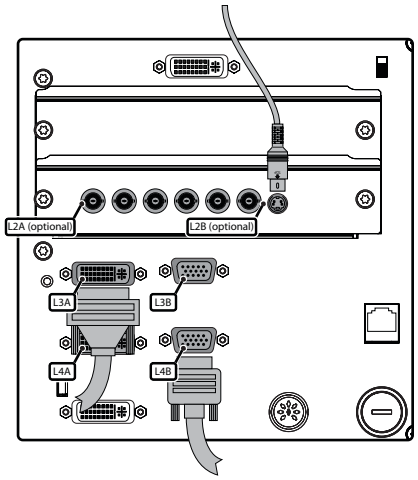


Image 7-13
Source connectors

2. Repeat the previous step for each source to be connected
3. Connect the data output of the Desktop generating PC to the Desktop input connector on the XDS-100
   ***Note:*** *The signal must be single link DVI and it must have the same resolution of the display wall. Only HDTV or WUXGA are accepted. Vertical refresh rate must be 60 Hz.*

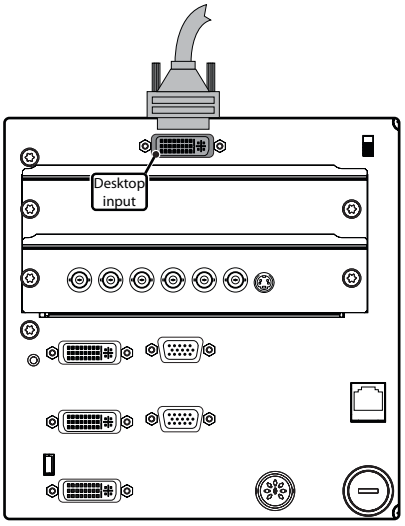


Image 7-14
Desktop input connector

4. Connect the output connector to the Display (e.g. flat screen, projector ...)

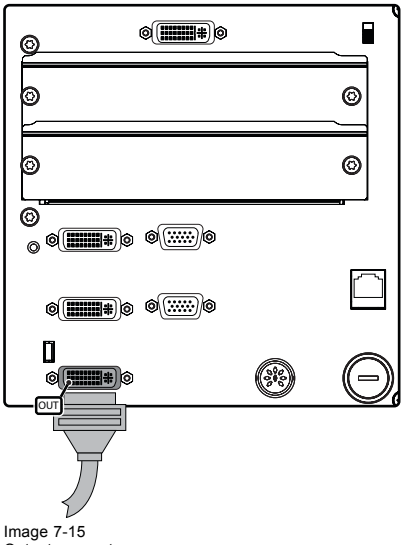


Image 7-15
Output connector

5. Connect the 8-pins DIN plug of the power supply to the power connector on the XDS-100.

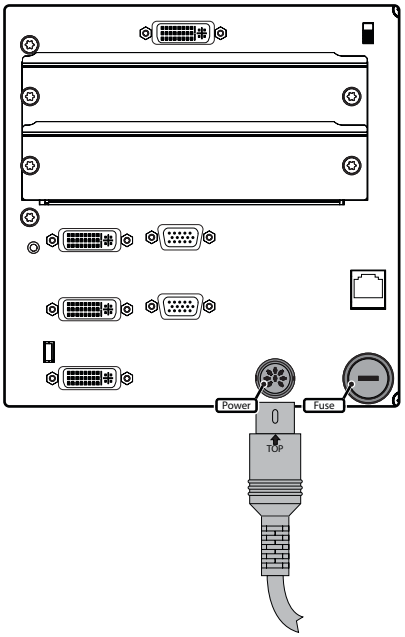


Image 7-16
Power plug

6. Connect the power cable to both the power supply and the wall outlet

**CAUTION: Only use the original power supply and power cables.**

**CAUTION: Do not use power supplies or power cables that are damaged. Any damaged item must be replaced by a new original one.**

## Network connections

1. Connect the network card of the Desktop generating PC to the network switch
2. Connect the Ethernet connector on the XDS-100 to the network switch

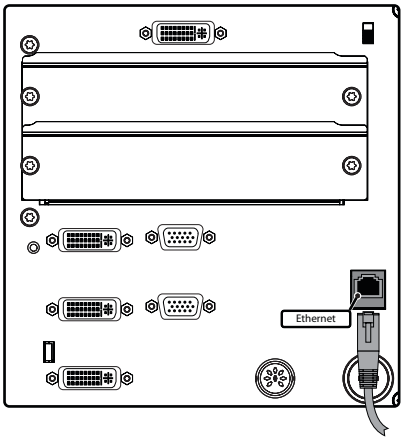


Image 7-17
Ethernet connector

3. Optionally, the network card of the image generators (e.g. workstation, laptop ...) can be connected to the network switch
   ***Tip:*** *These connections will allow to control the image generators through the keyboard/mouse of the Desktop generating PC if the correct client software has been installed on the image generators.*
4. Optionally, connect the network switch to the corporate LAN
   ***Tip:*** *This connection will make it possible to show the desktop of a remote computer which is connected to the same corporate LAN if the correct client software has been installed on the remote computer.*

## 7.4 Advanced setup

### Overview

- Description of the advanced setup
- Connections

### 7.4.1 Description of the advanced setup

### Description

A typical **advanced setup** consists of the following parts:

- XDS-100
- Desktop generating PC
- Network switch
- Image generators (sources)
- Remote desktop sharing computers
- Display
- Video Conference System
- Audio switch (Nexia Biamp)

The Desktop generating PC, the sources and the Display are connected to the XDS-100, The Video Conference System and the Audio switch are controlled through Ethernet by the XDS CC software running on the Desktop generating PC.

**The Video Conference systems which are supported are Tandberg Edge 85/95, Tandberg MXP6000 and Tandberg C60/C90.**

**The Audio switcher which is supported is Biamp Nexia PM.**

### Connection diagram

The Desktop generating PC is running the XDS CC software and sends its desktop to the XDS-100 Desktop input. A workstation (analog RGB), a DVD player (S-video) and a Video Conference System (single link DVI) are connected to the input connectors of the XDS-100. The Desktop generating PC and the XDS-100 are connected to the same network switch, which is also connected to the corporate LAN (optional). A remote desktop sharing computer is connected to the same corporate LAN.

The Video Conference System (Tandberg) can be connected to the network switch to be fully controllable by the XDS CC software.

An Audio switcher (Nexia Biamp) can also be connected to the network switch to be controlled by the XDS CC software. Microphones, speakers and the audio channel of the sources can be connected to this Audio switch.

The sources (both hard wired and remote) and layouts to be displayed on the Display can be selected using the XDS CC software user interface.

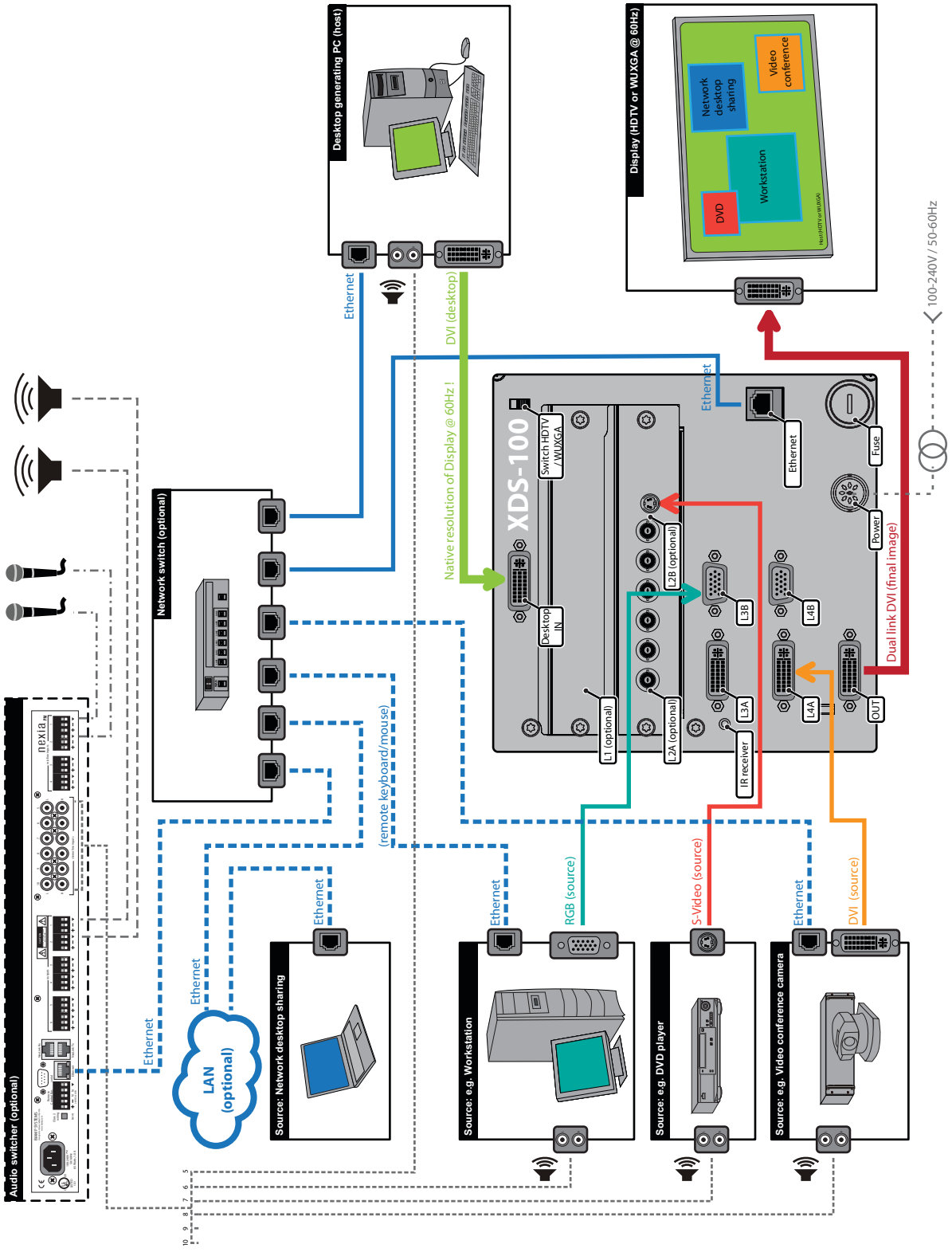


Image 7-18
XDS-100: advanced setup

## 7.4.2 Connections

### XDS-100 connections

1. Connect the source (e.g. image generator, workstation, laptop, camera ...) to one of the connectors of an input layer of the XDS-100

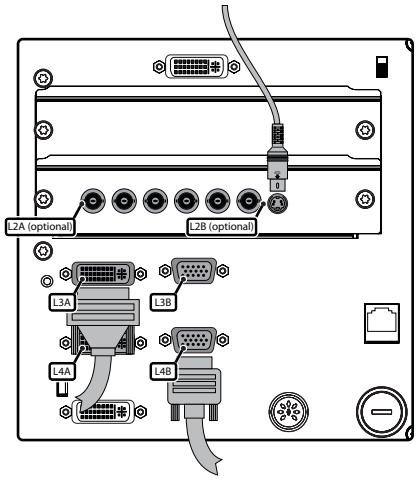


Image 7-19
Source connectors

2. Repeat the previous step for each source to be connected
3. Connect the data output of the Desktop generating PC to the Desktop input connector on the XDS-100
   ***Note:*** *The signal must be single link DVI and it must have the same resolution of the display wall. Only HDTV or WUXGA are accepted. Vertical refresh rate must be 60 Hz.*

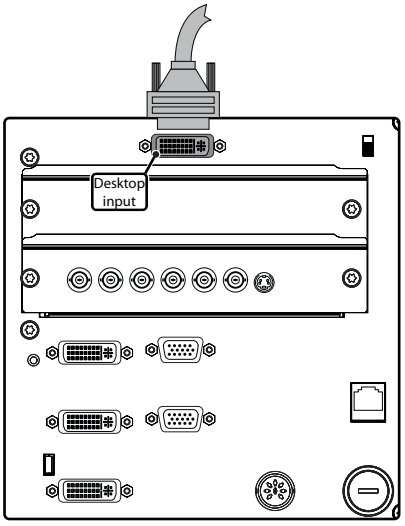


Image 7-20
Desktop input connector

4. Connect the output connector to the Display (e.g. flat screen, projector ...)

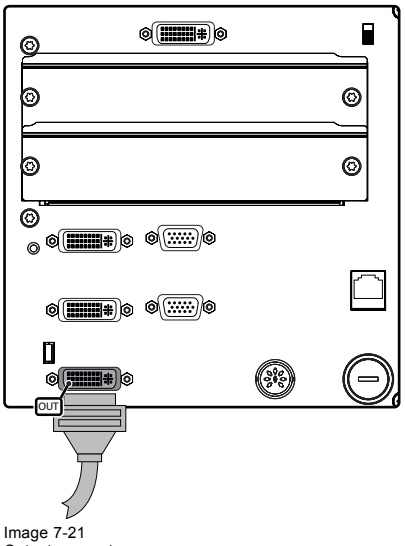


Image 7-21
Output connector

5. Connect the 8-pins DIN plug of the power supply to the power connector on the XDS-100.

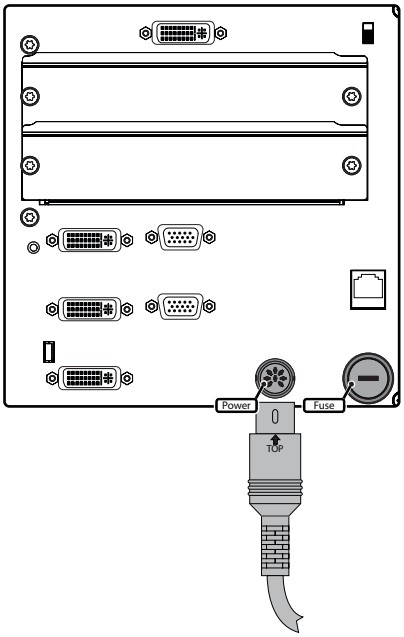


Image 7-22
Power plug

6. Connect the power cable to both the power supply and the wall outlet

**CAUTION: Only use the original power supply and power cables.**

**CAUTION: Do not use power supplies or power cables that are damaged. Any damaged item must be replaced by a new original one.**

## Network connections

1. Connect the network card of the Desktop generating PC to the network switch
2. Connect the Ethernet connector on the XDS-100 to the network switch

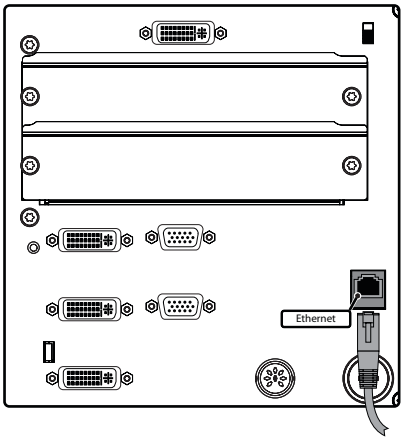


Image 7-23
Ethernet connector

3. Connect the Audio switcher to the network switch
4. Connect the Video Conference System to the network switch
5. Optionally, the network card of the image generators (e.g. workstation, laptop ...) can be connected to the network switch
   ***Tip:*** *These connections will allow to control the image generators through the keyboard/mouse of the Desktop generating PC if the correct client software has been installed on the image generators.*
6. Optionally, connect the network switch to the corporate LAN
   ***Tip:*** *This connection will make it possible to show the desktop of a remote computer which is connected to the same corporate LAN if the correct client software has been installed on the remote computer.*

### Audio switch connections

1. Connect the audio channels of the Desktop generating PC to the Audio switcher
2. Connect the audio channels of the sources to the Audio switcher
3. Connect speakers to the Audio switcher
4. Connect microphones to the Audio switcher

# 8. NETWORK CONFIGURATION

### About this chapter

The XDS-100 can be connected to a network allowing it to be accessed from and controlled by a connected network device. The Ethernet connection can be used for:

- control of the full XDS-100 display system
- XDS-100 firmware upgrade
- ...

In this chapter, three types of network configuration are explained and the way to do the setup of each of them:

- **Basic network configuration:** XDS-100 is connected directly to the Desktop generating PC
- **Standard network configuration without DHCP server**: XDS-100 and Desktop generating PC are both connected to a network switch
- **Standard network configuration (ADVISED CONFIGURATION):** XDS-100 and Desktop generating PC are both connected to a network switch, that is also connected to the corporate LAN (having a DHCP server and DNS server)

Next to these two network configurations, a fourth option exists: if your Desktop generating PC has two Ethernet cards on board, one of them can be connected to the network switch of the local XDS-100 network (or directly to the XDS-100, using a cross type Ethernet cable) while the other one is connected to the corporate LAN. In this configuration, both local networks on the Desktop generating PC must be configured separately, one having a fixed IP address, the other one acquiring the IP address from the DHCP server of the corporate LAN. This configuration is not explained in detail.

### Overview

- Setting up a basic network configuration
- Setting up a standard configuration without DHCP server
- Setting up a standard configuration

## 8.1 Setting up a basic network configuration

### Introduction

This network configuration is typically used in a **Basic physical setup**.

To set up a basic network configuration, two procedures are needed:

- in the XDS-100, enter a fixed IP address
- set the network connection of the Desktop generating PC to a fixed IP address within the same range

Example:

- fixed IP address in the XDS-100: 192.168.001.010, subnet mask 255.255.255.000
- fixed IP address in the Desktop generating PC: 192.168.001.020, subnet mask 255.255.255.000

### How to set a fixed IP address in the XDS-100?

1. Make sure the physical connection is according to what has been explained earlier
2. In the OSD, navigate to *Installation* > *Network settings...*

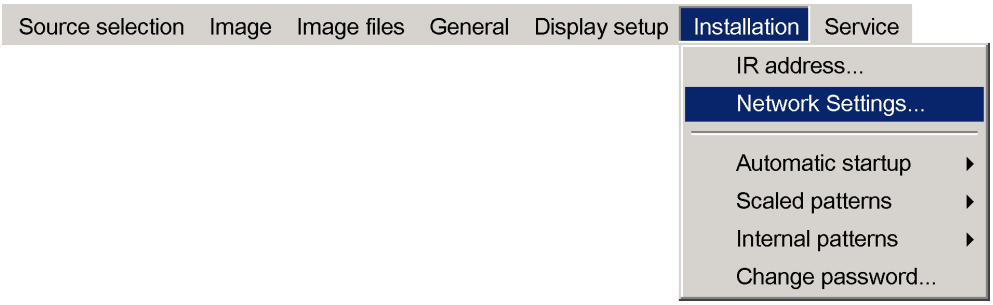


Image 8-1

3. Confirm by pressing **ENTER**

A dialog box appears:

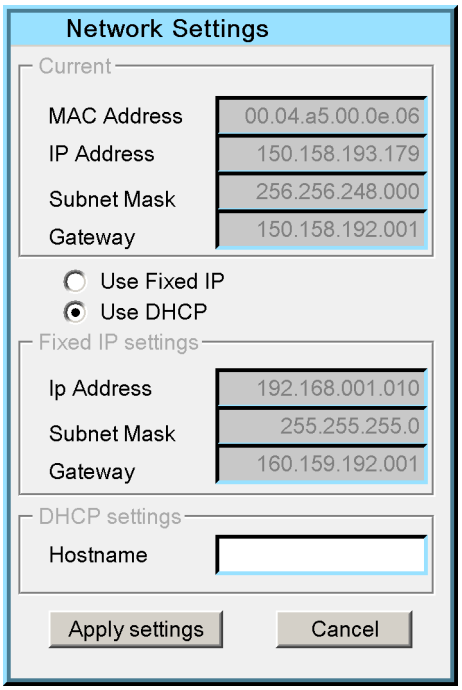


Image 8-2

4. In the dialog box, navigate to *Use Fixed IP* and press **ENTER** to select
5. Navigate to *IP address* and press **ENTER** to activate the edit box
6. Enter the desired fixed IP address:
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the desired character, or press the desired digit button on the RCU
7. Confirm the IP address by pressing **ENTER**
8. Navigate to *Apply settings* and press **ENTER** to confirm

   A dialog box is displayed, showing the progress of the update.
9. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## How to set a fixed IP address in the Desktop generating PC?

1. In Windows, go to *Start* > *Control Panel* and double click *Network Connections* from the Control Panel list

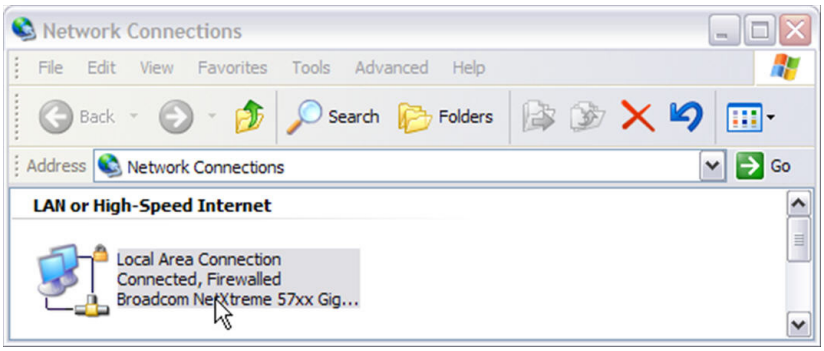


Image 8-3
Network Connections

2. Right-click the desired Local Area Connection and select *Properties* from the drop down menu

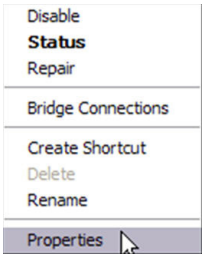


Image 8-4
Network Connections: right click menu

3. In the dialog box, double-click *Internet Protocol (TCP/IP)*

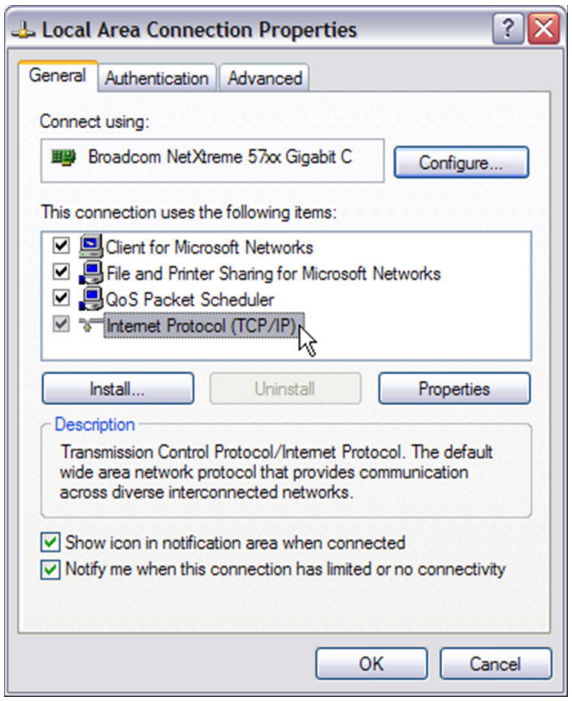


Image 8-5
Local Area Connection Properties

4. In the next dialog box, enter the following data:
   - check the radio button *Use the following IP address:*
   - IP address (e.g. 192.168.1.20)
   - Subnet mask (e.g. 255.255.255.0)

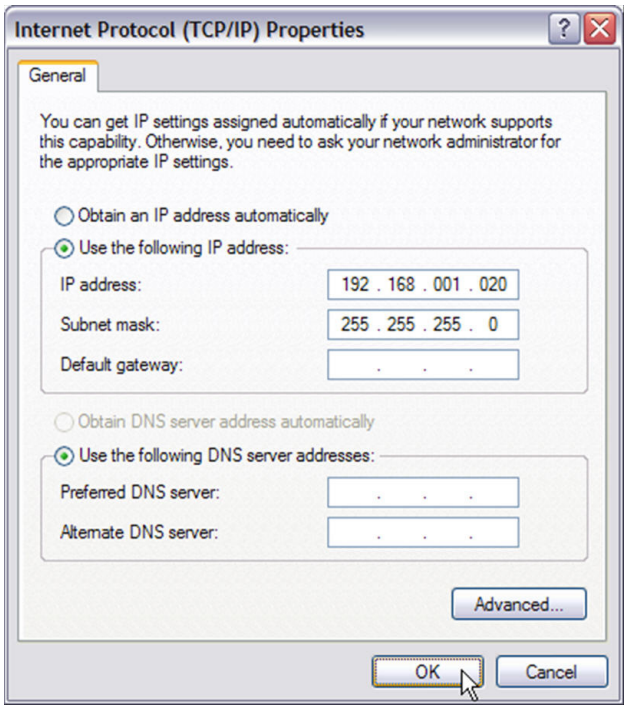
Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 001 . 020
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Image 8-6
Internet Protocol Properties

5. Confirm by clicking *OK*
6. Close the remaining windows

## 8.2 Setting up a standard configuration without DHCP server

### Introduction

This network configuration is typically used in **Standard physical setup**.

To set up a standard configuration where a network switch is used, without DHCP server, two procedures are needed:

- in the XDS-100, enter a fixed IP address
- set the network connection of the Desktop generating PC to a fixed IP address within the same range

### How to set a fixed IP address in the XDS-100?

1. See "Setting up a basic network configuration", page 39

### How to set a fixed IP address in the Desktop generating PC?

1. See "Setting up a basic network configuration", page 39

## 8.3 Setting up a standard configuration

### Introduction

This network configuration, which is the **advised configuration,** is typically used in **Standard physical setup** and in **Advanced physical setup**.

To set up a standard configuration where an network switch is used, that is also connected to the corporate LAN having a DHCP and DNS server, two procedures are needed:

- in the XDS-100, enable DHCP
- set the network connection of the Desktop generating PC to an automatically obtained IP address

**If DHCP is enabled in XDS-100, but no DHCP server is active in the (local) network, XDS-100 will switch to Static IP address after about 2 minutes to allow communication (e.g. to re-configure the network through the Projector Support Tool). In this case, the static IP address is** `169.254.0.1`

## How to enable DHCP in the XDS-100?

1. Make sure the physical connection is according to what has been explained earlier
2. In the OSD, navigate to *Installation* > *Network settings*...

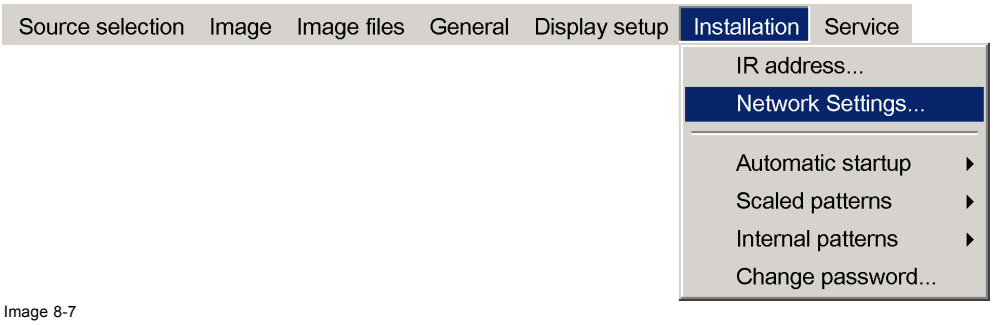


Image 8-7

3. Confirm by pressing **ENTER**

   A dialog box appears:

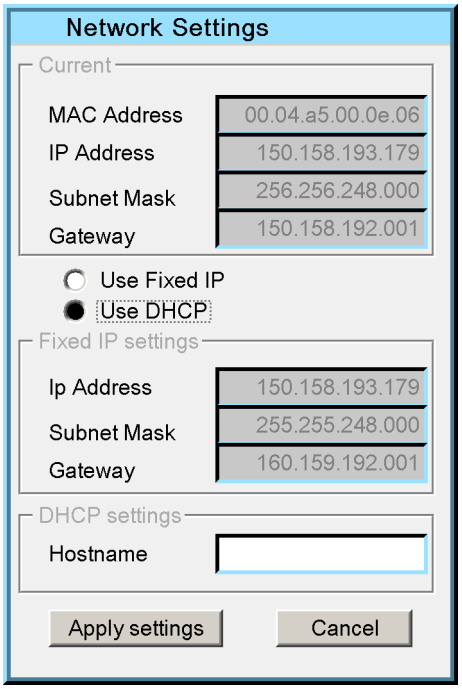


Image 8-8

4. In the dialog box, navigate to *Use DHCP* and press **ENTER** to select
5. Navigate to *Apply settings* and press **ENTER** to confirm

   A dialog box is displayed, showing the progress of the update.

6. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## How to set an automatically obtained IP address in the Desktop generating PC?

1. In Windows, go to *Start* > *Control Panel* and double click *Network Connections* from the Control Panel list

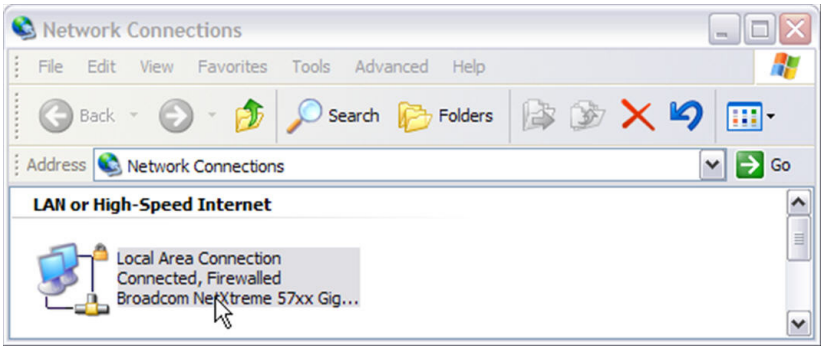


Image 8-9
Network Connections

2. Right-click the desired Local Area Connection and select *Properties* from the drop down menu

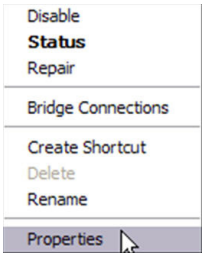


Image 8-10
Network Connections: right click menu

3. In the dialog box, double-click *Internet Protocol (TCP/IP)*

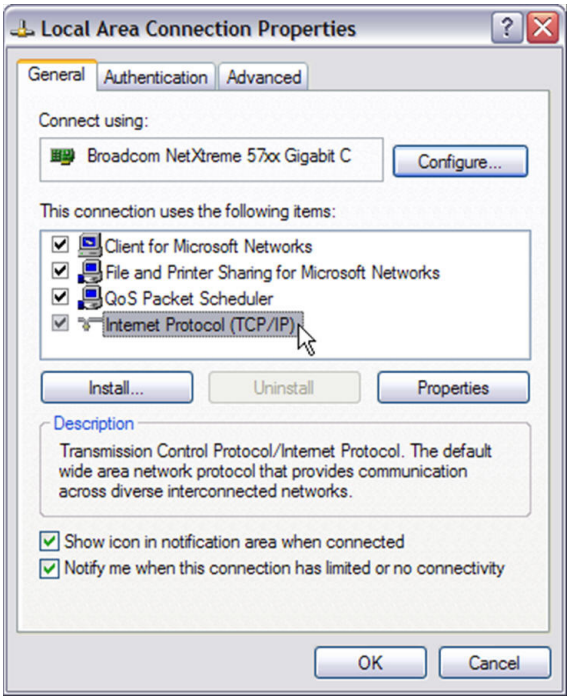


Image 8-11
Local Area Connection Properties

4. In the next dialog box check the radio button *Obtain an IP address automatically*

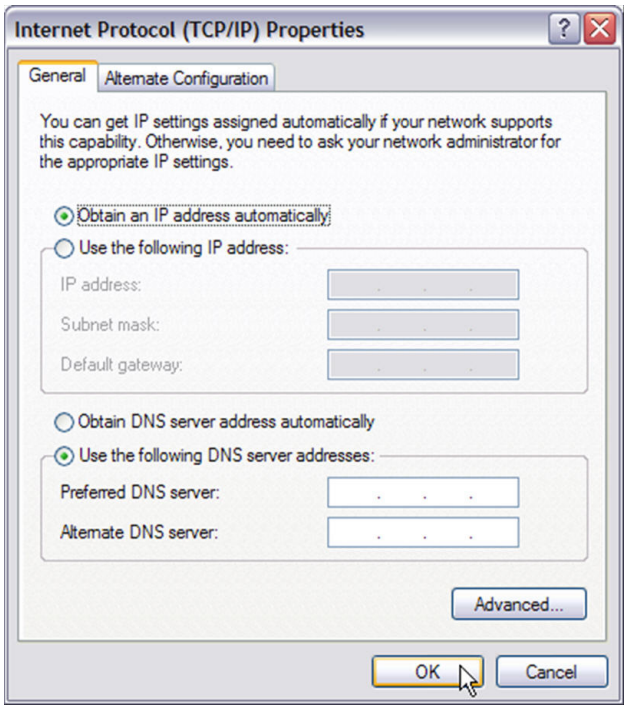
Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Image 8-12
Internet Protocol Properties

5. Confirm by clicking *OK*
6. Close the remaining windows

# 9. GETTING STARTED

### About this chapter

This chapter is a **guideline to get a source displayed**, without getting lost in advanced settings and details.

First of all, the XDS-100 must be switched to the correct **resolution**. Logically, the graphics card of the Desktop generating PC must be capable of generating this resolution and the Display must be able to handle it as well.

In a next step, the **RCU** must be programmed to allow communication with the XDS-100.

Once the XDS-100 is **powered**, it will automatically switch to active state, i.e. an output signal will be available after the power-up cycle has been finished. If not in use, the XDS-100 can be switched to standby at any time. And from the standby state, it only takes a few seconds to get the unit in its active state back again.

At that point (in active state), a **source can be displayed directly from the OSD** of the XDS-100.

If a **Desktop generating PC** is used, the Desktop must be enabled in the XDS-100 and the XDS CC software must be installed on the Desktop generating PC. After that, **multiple windows can be displayed** at the same time and the XDS-100 is fully controllable from the XDS CC software.

### Overview

- Switching to the correct resolution
- Setting the RCU address
- Powering the XDS-100
- Activating the XDS-100
- Displaying a single source
- Enabling the Desktop in XDS-100
- XDS CC software installation
- Displaying sources and layouts

## 9.1 Switching to the correct resolution

### Resolution switch

A switch is available to set the display system resolution to one of the following values:

- Full HD resolution 1920 x 1080 is selected if the switch is in its upper position
- WUXGA resolution 1920 x 1200 is selected if the switch is in its lower position

The selected resolution must be within the capabilities of the Display! The data output of the Desktop generating PC must be set to the same value. Vertical refresh rate must be 60 Hz.

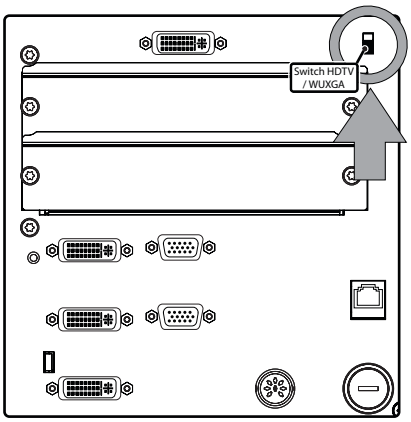


Image 9-1
Resolution switch

**It is required to reboot the XDS-100 after switching the Resolution switch to the other position!**

## 9.2 Setting the RCU address

### RCU address

To establish communication, the RCU address must be set to the same value as the XDS-100 IR (or RC5) address. The user can change the IR address of the XDS-100. If he/she does so, the RCU address must be reprogrammed accordingly.

**The default address for both RCU and XDS-100 is 0.**

**The RCU address must be in the range 0 .. 9.**

**See "IR address", page 64 to learn how to check/set the XDS-100 address.**

### How to set the RCU address?

1. Use a pencil to press the sunk-down **Address** button on the RCU

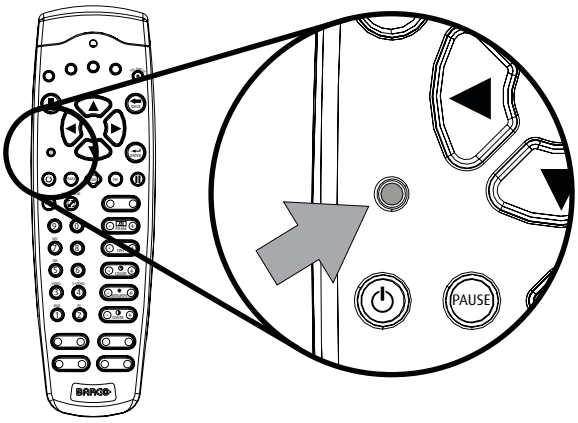


Image 9-2
RCU: Address button

2. Within 5 seconds after pressing the **Address** button, press one of the digit buttons to enter its value as RCU serial address

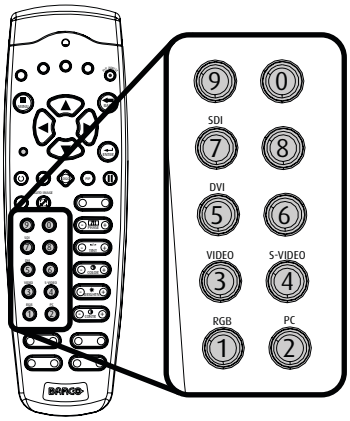


Image 9-3
RCU: Digit buttons

### Example

Press the **Address** button and within 5 seconds, press **4** to program the RCU RC5 address to “4”.

**To guarantee good communication, point the RCU towards the Infrared Receiver of the XDS-100 which is located at the front side of the box, just above the Barco sign.**

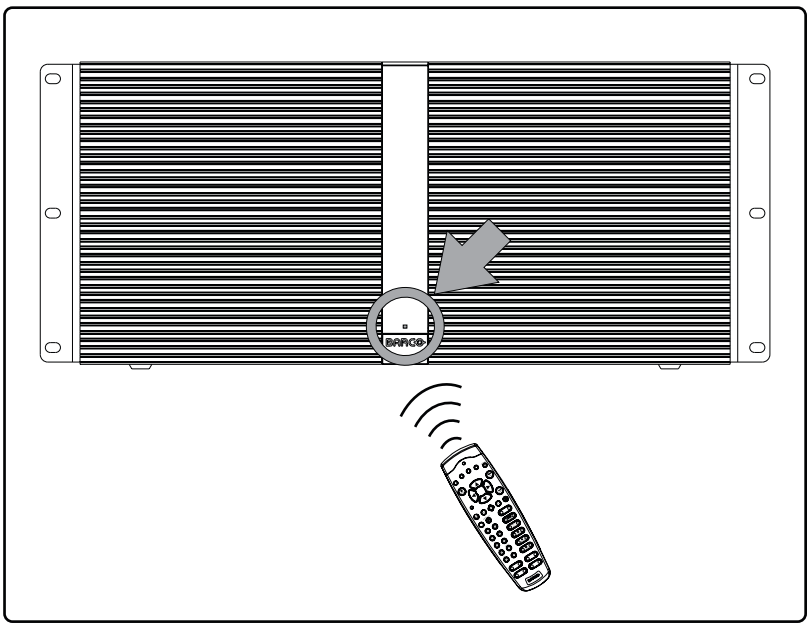

Image 9-4
IR receiver

**If no button is pressed within 5 seconds after the Address button has been pressed, the RCU serial address will be set to its default value again, being 0.**

**Each XDS-100 has a common address (which by default is 0 but it can be set to 1 as well). So programming the RCU address to 0 will establish communication to a new XDS-100, coming out of the box.**

## 9.3 Powering the XDS-100

### Introduction

As soon as the power supply is connected to both the XDS-100 unit and the wall outlet, the XDS-100 starts configuring and goes to active state. If the XDS-100 is part of a full display system - which will be the case - a specified power-on sequence must be followed.

### How to power the XDS-100?

1. Connect the power supply to both the XDS-100 and the wall outlet

### Power-on sequence in a XDS-100 display system?

The XDS-100 is powered as soon as the power connection is made. There is no additional switch. So it will be powered first.

1. Network switch
2. Desktop generating PC
3. Display
4. Sources

## 9.4 Activating the XDS-100

### Introduction

The XDS-100 can be switched to standby and back to active state at any time using the RCU or the XDS CC software.

### How to switch the XDS-100 to standby?

1. Press the standby button on the RCU for 3 seconds

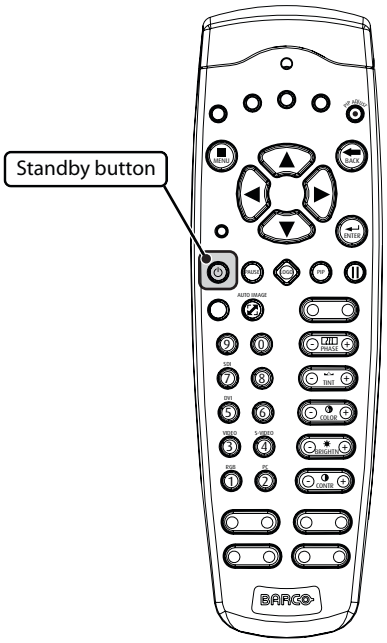


Image 9-5
RCU: standby button

### How to switch the XDS-100 from standby to active state?

1. Press the standby button on the RCU. See image 9-5

**Switching the XDS-100 to standby or to active state when it is powered can also be done through the XDS CC software. See the concerning user guide or reference guide.**

## 9.5 Displaying a single source

### Introduction

Even if no Desktop generating PC is connected to the XDS-100 it is possible to display a connected source (full screen). Below is explained how this can be done.

**It must be clear that the XDS-100 has been designed to be connected to and controlled by a Desktop generating PC, running the XDS CC software.**

**In the OSD of the XDS-100, make sure *General* > *Desktop* is set to *Off*.**

### How to show a connected source on the display?

It is assumed that a display and at least one source are connected to the XDS-100 and that each unit is powered.

1. Press the **MENU** button on the RCU to display the OSD
2. Press ▼ to pull down the *Source selection* menu

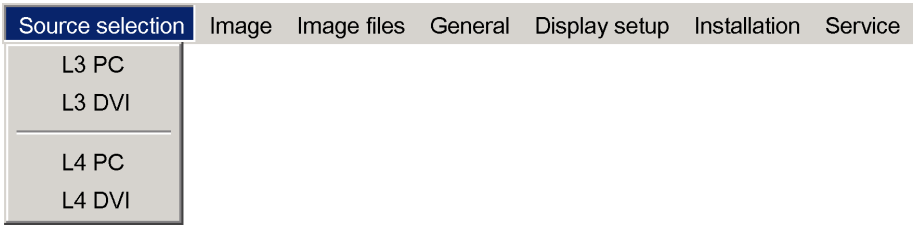


Image 9-6

3. Press ▲ or ▼ to select the source to be displayed

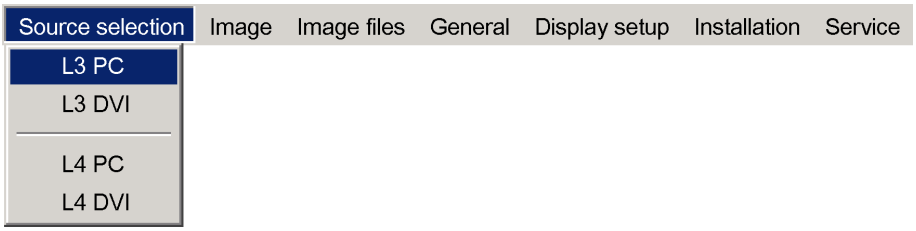


Image 9-7

4. Press **ENTER** to display the selected source

***Tip:*** *An available source is indicated by a Barco logo in front of it. A displayed source is indicated by a bullet in front of it.*

***Tip:*** *It is also possible to press one of the direct source selection keys on the RCU. See "XDS-100 control", page 114.*

*Example: pressing **5** on the RCU will cycle through the available DVI sources, starting at the highest input layer (being layer 1).*

## 9.6 Enabling the Desktop in XDS-100

### Introduction

Before the Desktop of the Desktop generating PC can be displayed through the XDS-100, Desktop must be enabled in it's OSD. The last setting is always restored after reboot.

### How to enable the Desktop in XDS-100?

1. In the OSD, navigate to *General* > *Desktop* > *On*

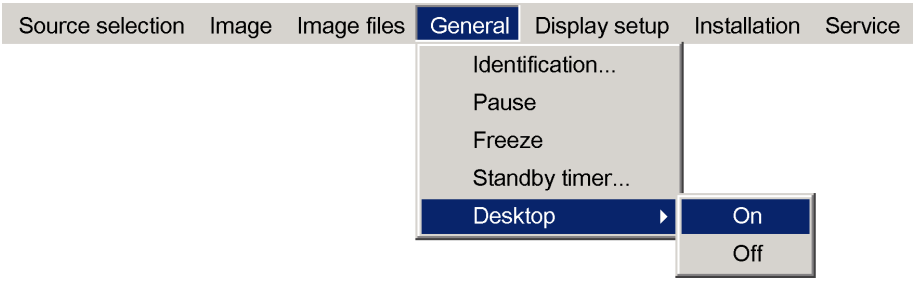


Image 9-8

2. Press **ENTER** to activate the selection
3. Press **Back** to return one step in the menu or press **MENU** to exit the menu

## 9.7 XDS CC software installation

### Introduction

The XDS-100 system has been developed to be connected to and controlled by a Desktop generating PC running XDS CC software. The XDS CC software must be installed on the Desktop generating PC.

If the XDS CC **client software** is used, a license file must be imported on the desktop generating PC or on the XDS Administration server to activate the client software.

**CAUTION: See the XDS CC software user guide and reference guide to learn more about the XDS CC software suite.**

**CAUTION: If an input board is added or removed or if an existing input board is replaced by a different type, the input depending data must be cleared by clicking the button 'Reset Input Configuration' in the *Configure Display Settings* page of the XDS CC software configuration. See concerning chapter.**

### Overview

- Setting the graphic driver
- Software installation
- Getting a license
- Importing the license file to XDS CC software

## 9.7.1 Setting the graphic driver

### Introduction

In the graphic card of the Desktop generating PC, make sure to select **Single Display** or **Clone mode** only. Other settings like Dual View or similar will not work! The color quality must be set to the highest value for the system to be able to detect the color keys. The Desktop color settings in the graphics card must be the default settings. And the resolution must be set to one of the two available resolutions in the XDS-100.

### How to set the graphic driver in Windows XP and Windows Vista?

1. Right click on the desktop
2. Select the Graphic driver control panel
3. Set *Resolution* to the same as the XDS-100 resolution
4. Set *Color Quality* to the highest value (32 bit)
5. Leave the Desktop color settings to the default value

### How to set the graphic driver in Windows 7?

1. Right click on the desktop
2. Select *Screen Resolution*

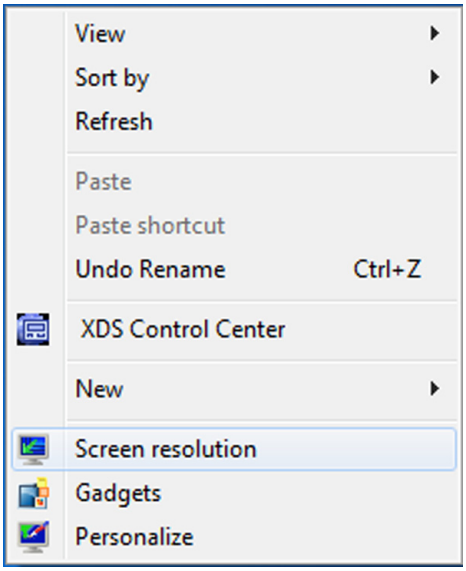


Image 9-9
Windows 7 Desktop: drop down menu

3. Set *Resolution* to the same as the XDS-100 resolution

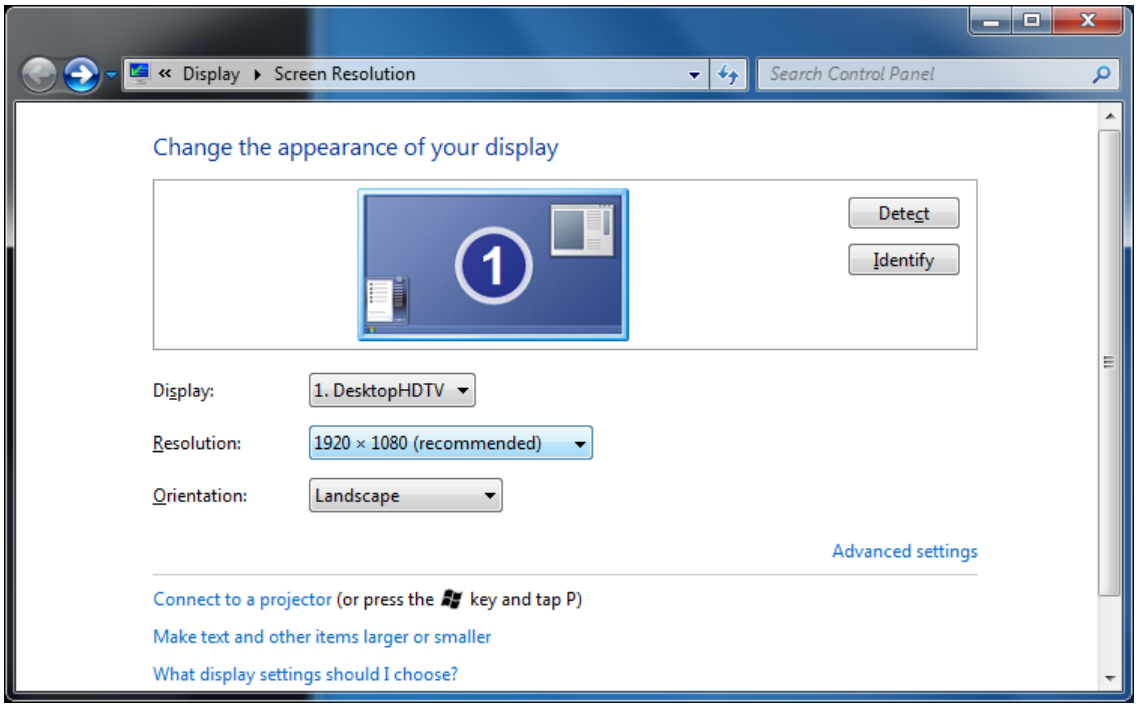


Image 9-10
Windows 7: Screen Resolution

4. Select *Make text and other items larger or smaller*. See picture above
5. Check the radio button *Smaller - 100%*

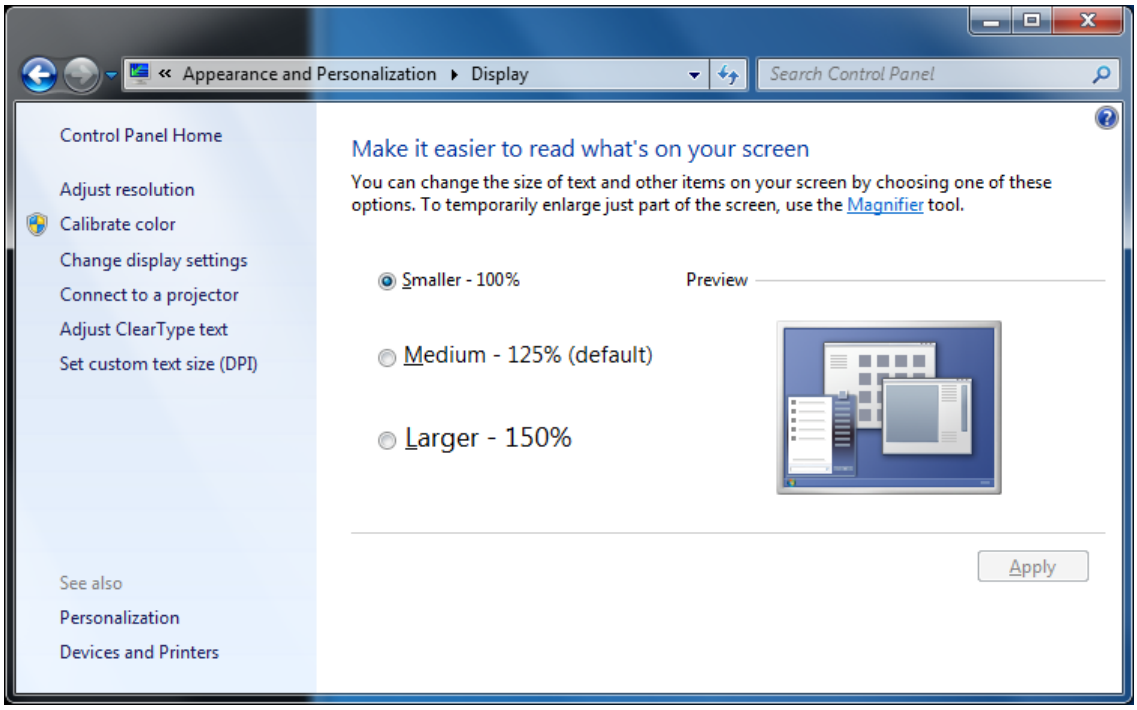
« Appearance and Personalization ▸ Display
Search Control Panel
Control Panel Home
Adjust resolution
Calibrate color
Change display settings
Connect to a projector
Adjust ClearType text
Set custom text size (DPI)
Make it easier to read what's on your screen
You can change the size of text and other items on your screen by choosing one of these options. To temporarily enlarge just part of the screen, use the Magnifier tool.
Smaller - 100%
Medium - 125% (default)
Larger - 150%
Preview
Apply
See also
Personalization
Devices and Printers

Image 9-11
Windows 7: Display Appearance

6. Close all windows

## 9.7.2 Software installation

### Introduction

The procedure below describes the best practices to install the XDS CC software in the most easy way.

The installer file has the following format: **XDS_w.x.y.z_XDS100.exe**, where w.x.y.z is the version.

**CAUTION: You must have Windows Administrator Privileges to install XDS CC software. Please check with your IT department in case of doubt.**

## Necessary tools

XDS CC software installer: XDS_w.x.y.z_XDS100.exe

## How to install the XDS CC software?

1. Copy the installer file to the Desktop generating PC
2. Double click the installer
3. Uncheck the box if you do have Windows Administrator Privileges on the Desktop generating PC and click *Next* >. Click *Cancel* to quit the installation if you don't.

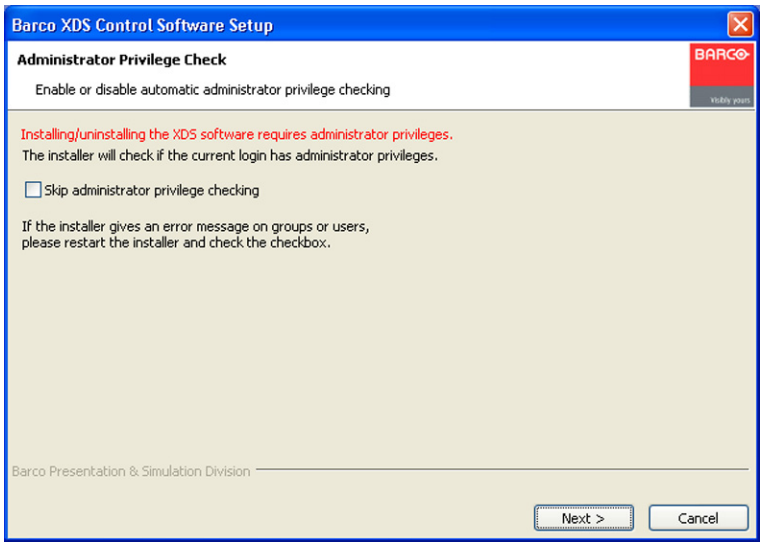
Barco XDS Control Software Setup
Administrator Privilege Check
Enable or disable automatic administrator privilege checking
BARCO
Installing/uninstalling the XDS software requires administrator privileges.
The installer will check if the current login has administrator privileges.
Skip administrator privilege checking
If the installer gives an error message on groups or users,
please restart the installer and check the checkbox.
Barco Presentation & Simulation Division
Next >
Cancel

Image 9-12
XDS CC SW: installation process

4. In the Welcome screen, the software version of the installer can be checked. Close all other applications and click *Next* >

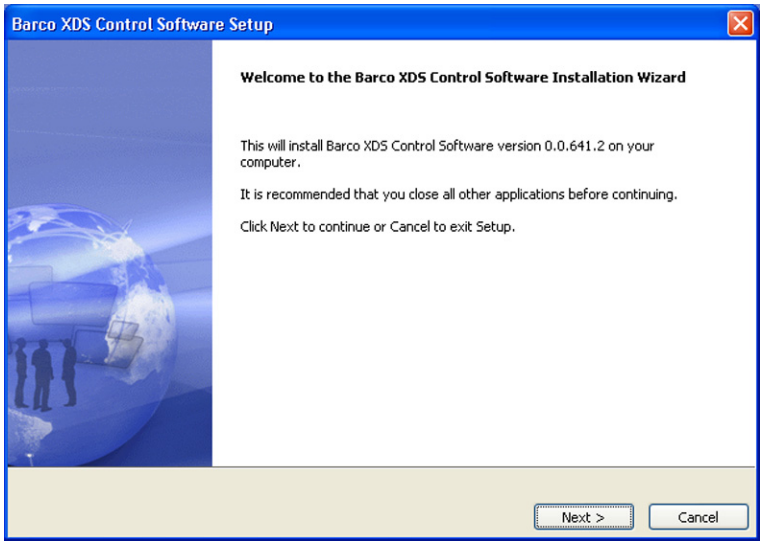
Barco XDS Control Software Setup
Welcome to the Barco XDS Control Software Installation Wizard
This will install Barco XDS Control Software version 0.0.641.2 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue or Cancel to exit Setup.
Next >
Cancel

Image 9-13
XDS CC SW: installation process

5. Read the End User License Agreement, select the *Accept* radio button and click *Next* >

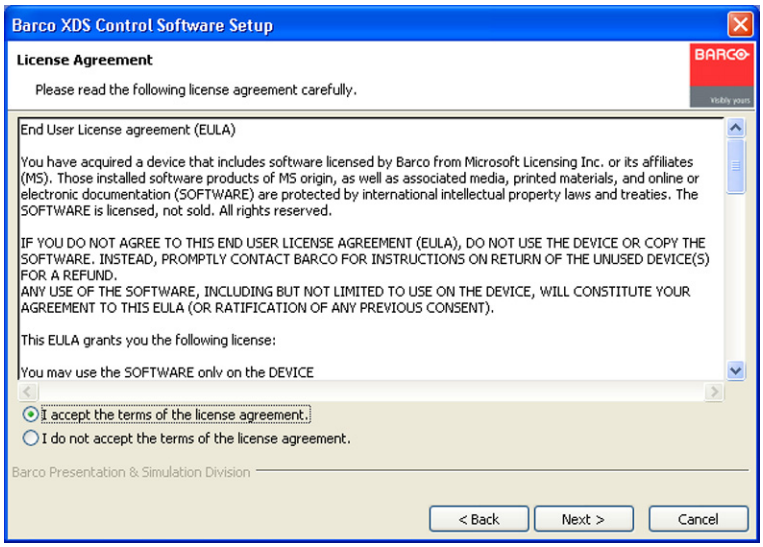
Barco XDS Control Software Setup
License Agreement
Please read the following license agreement carefully.
End User License agreement (EULA)
You have acquired a device that includes software licensed by Barco from Microsoft Licensing Inc. or its affiliates (MS). Those installed software products of MS origin, as well as associated media, printed materials, and online or electronic documentation (SOFTWARE) are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT (EULA), DO NOT USE THE DEVICE OR COPY THE SOFTWARE. INSTEAD, PROMPTLY CONTACT BARCO FOR INSTRUCTIONS ON RETURN OF THE UNUSED DEVICE(S) FOR A REFUND.
ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICE, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).
This EULA grants you the following license:
You may use the SOFTWARE only on the DEVICE
I accept the terms of the license agreement.
I do not accept the terms of the license agreement.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-14
XDS CC SW: installation process

6. Enter a **Display ID** and click *Next* >

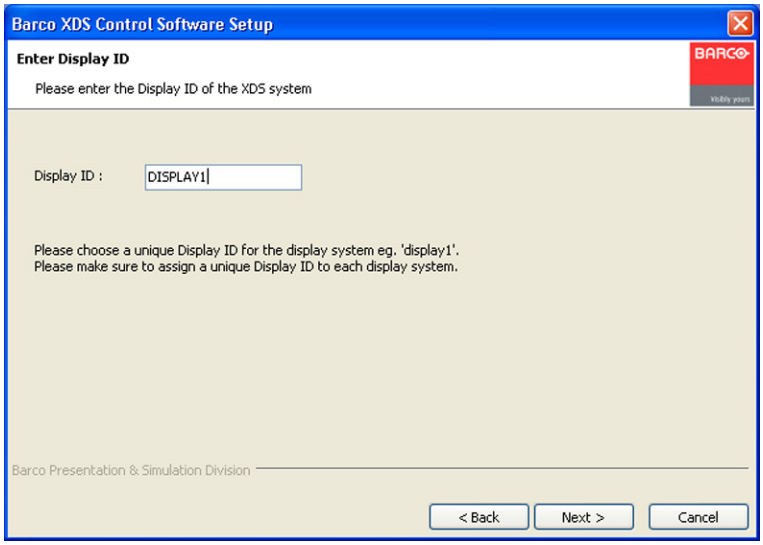
Barco XDS Control Software Setup
Enter Display ID
Please enter the Display ID of the XDS system
Display ID :
DISPLAY1
Please choose a unique Display ID for the display system eg. 'display1'.
Please make sure to assign a unique Display ID to each display system.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-15
XDS CC SW: installation process

***Note:*** *This Display ID must be* ***unique*** *name.*

7. Enter a **Display Name** and click *Next* >

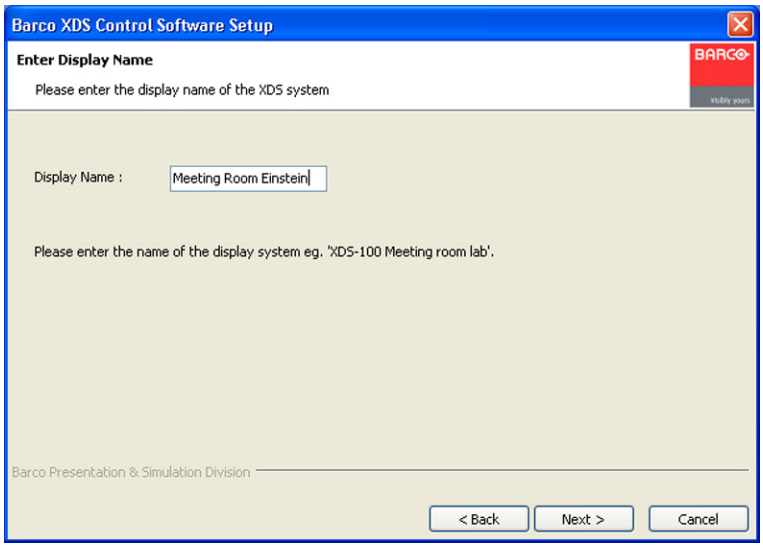
Barco XDS Control Software Setup
Enter Display Name
Please enter the display name of the XDS system
BARCO
Display Name :
Meeting Room Einstein
Please enter the name of the display system eg. 'XDS-100 Meeting room lab'.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-16
XDS CC SW: installation process

8. Enter a **Workgroup Name** and click *Next >*

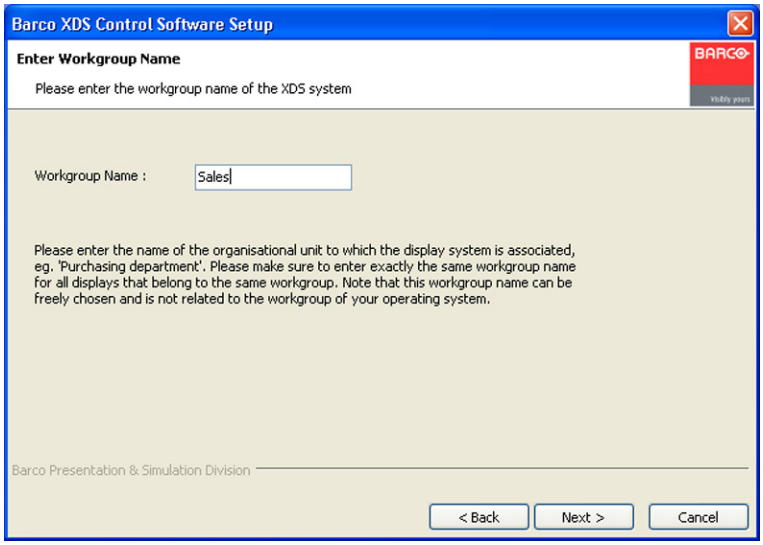
Barco XDS Control Software Setup
Enter Workgroup Name
Please enter the workgroup name of the XDS system
BARCO
Workgroup Name :
Sales
Please enter the name of the organisational unit to which the display system is associated, eg. 'Purchasing department'. Please make sure to enter exactly the same workgroup name for all displays that belong to the same workgroup. Note that this workgroup name can be freely chosen and is not related to the workgroup of your operating system.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-17
XDS CC SW: installation process

9. Enter a **Location Name** and click *Next >*

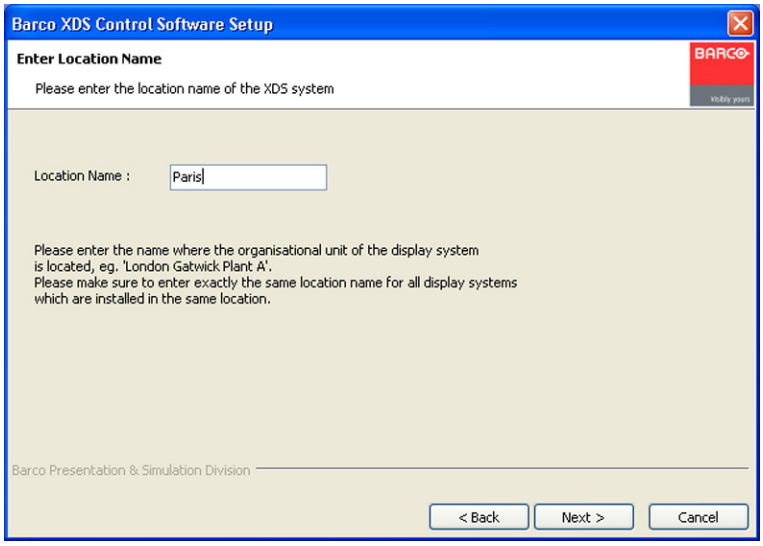
Barco XDS Control Software Setup
Enter Location Name
Please enter the location name of the XDS system
BARCO
Location Name :
Paris
Please enter the name where the organisational unit of the display system is located, eg. 'London Gatwick Plant A'.
Please make sure to enter exactly the same location name for all display systems which are installed in the same location.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-18
XDS CC SW: installation process

10. Enter the **XDS-100 Network Address** (Hostname or fixed IP address) and click *Next* >

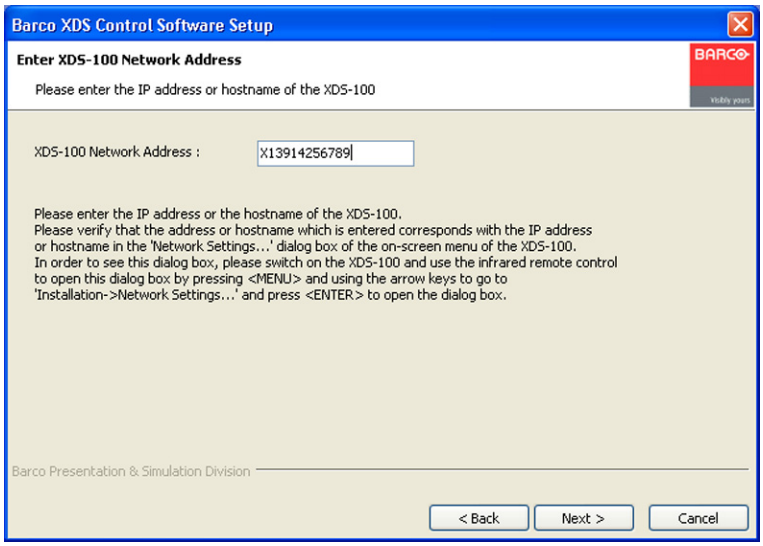
Barco XDS Control Software Setup
Enter XDS-100 Network Address
Please enter the IP address or hostname of the XDS-100
XDS-100 Network Address :
X13914256789
Please enter the IP address or the hostname of the XDS-100.
Please verify that the address or hostname which is entered corresponds with the IP address
or hostname in the 'Network Settings...' dialog box of the on-screen menu of the XDS-100.
In order to see this dialog box, please switch on the XDS-100 and use the infrared remote control
to open this dialog box by pressing <MENU> and using the arrow keys to go to
'Installation->Network Settings...' and press <ENTER> to open the dialog box.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-19
XDS CC SW: installation process

***Tip:*** *The default Hostname of XDS-100 is* ***X<serial number>****.The serial number itself can be read from the label on the rear side of the XDS-100, next to the input connectors.*

*Example: the Hostname of an XDS-100 with serial number 1391425678 is X1391425678*

11. Enter an **Administrator Name** and click *Next* >

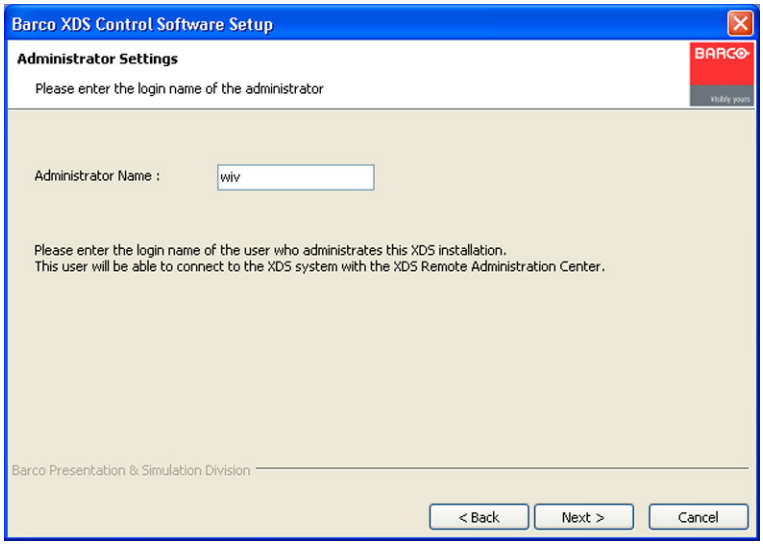
Barco XDS Control Software Setup
Administrator Settings
Please enter the login name of the administrator
Administrator Name :
wiv
Please enter the login name of the user who administrates this XDS installation.
This user will be able to connect to the XDS system with the XDS Remote Administration Center.
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-20
XDS CC SW: installation process

***Warning:*** *The Administrator Name must be a known Windows Login Name, having a non-blank password on the Desktop generating PC or on the local area network.*

12. Check the data as it was entered and click *Next* > if it is according to your wishes

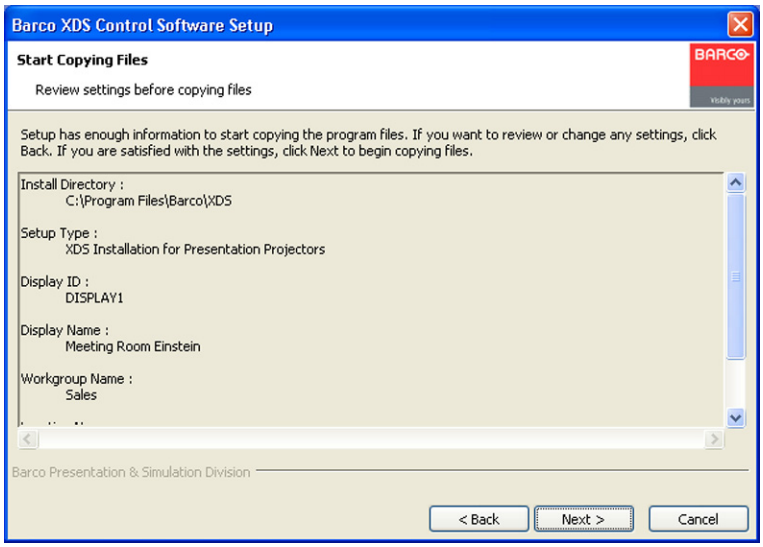
Barco XDS Control Software Setup
Start Copying Files
Review settings before copying files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Install Directory :
C:\Program Files\Barco\XDS
Setup Type :
XDS Installation for Presentation Projectors
Display ID :
DISPLAY1
Display Name :
Meeting Room Einstein
Workgroup Name :
Sales
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-21
XDS CC SW: installation process

The next window will show a bar indicating the XDS CC software installation progress

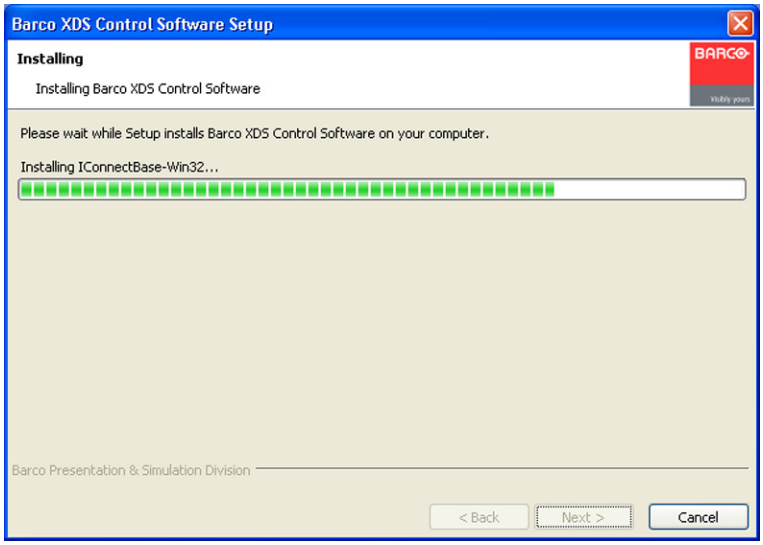
Barco XDS Control Software Setup
Installing
Installing Barco XDS Control Software
Please wait while Setup installs Barco XDS Control Software on your computer.
Installing IConnectBase-Win32...
Barco Presentation & Simulation Division
< Back
Next >
Cancel

Image 9-22
XDS CC SW: installation process

After installation, a new window will pop up.

13. According to your wishes, check or uncheck the boxes to create a Desktop Shortcut and/or a Quick Launch Shortcut

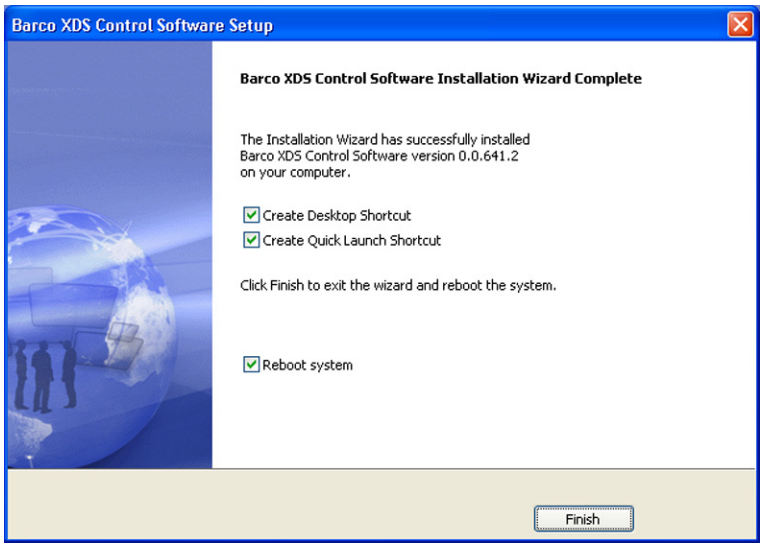
Barco XDS Control Software Setup
Barco XDS Control Software Installation Wizard Complete
The Installation Wizard has successfully installed
Barco XDS Control Software version 0.0.641.2
on your computer.
Create Desktop Shortcut
Create Quick Launch Shortcut
Click Finish to exit the wizard and reboot the system.
Reboot system
Finish

Image 9-23
XDS CC SW: installation process

14. Check the box to reboot the system and click *Finish*. See image 9-23

    The Desktop generating PC will reboot and the XDS CC software will automatically start.

### Defaults

During the software installation, some defaults are installed automatically. Some of these settings can be changed in the Configuration pages by the XDS Administrator.

An overview of the settings for which defaults are stored is listed below:

- The XDS applications are added to the Window Firewall exception list
- SSL Authentication and Encryption are disabled
- XDS User Management is disabled
- No IP address, nor Hostname is specified for Administration server. This means that the license –if needed – will be stored on the Desktop generating PC

## 9.7.3 Getting a license

### Introduction

Although XDS CC software does not require a license file to work, additional functionalities such as **XDS Desktop sharing** and **XDS Remote Control Center** (installer **XDS_w.x.y.z_UserClients.exe** ) and **XDS Remote Administration client** (installer **XDS_w.x.y.z_AdminClients.exe**) require a license file to be installed on the Desktop generating PC or on the XDS Administration server (if available and if its IP address is defined in the configuration pages).

By default, the license file is sent by E-mail by the time the unit is shipped to the customer. If you did not receive it though, you can send an E-mail to Barco requesting this license file. Your request must include the **system ID**. For XDS-100, this system ID is the serial number of the device, as it has been entered during the XDS CC software installation on the Desktop generating PC. The acquired license file must be copied to the Desktop generating PC from where it can be imported through the XDS CC software user interface.

### How to get the system ID?

1. In the XDS CC user interface, navigate to *Help* > *System ID* and click it
2. Read the system ID as it is displayed in the dialog.

### How to get the license file?

1. Send an E-mail to the following E-mail address: Service.Presentation_and_simulationEMEA@barco.com or to sales.pns.emea@barco.com and include the following data in your message:

- PO (Purchase Order) number
- System type, being XDS-100
- System ID (in case of XDS-100, the serial number as it has been entered during the XDS CC software installation!)
- Operating system (Irix, Linux, Windows, ...)
- Options required + amount, according to the sales order:
  - Desktop Sharing clients
  - Remote Control Center clients
  - Remote Pointer
  - Remote Administrator
- Company name
- Address
- Zip code & state
- Country
- Contact person
- Job title
- Telephone
- E-mail address where the license file is to be sent
- Reason for this request (e.g. Brand new system, Expired license file, ...)

2. A license file will be received by E-mail, typically **XDS.lic**

### 9.7.4 Importing the license file to XDS CC software

#### Necessary tools

License file (XDS.lic), stored on the Desktop generating PC

#### How to import the received license file?

1. Start the XDS CC software on the Desktop generating PC by rebooting it
   ***Tip:*** *Make sure to log in using the Administrator name entered during the XDS CC software installation*
2. From the XDS CC software user interface, open the *Help* menu
3. Click *Import License File*
4. Select the license file from location where it was saved
5. Restart the Desktop generating PC

## 9.8 Displaying sources and layouts

#### Introduction

On first startup of the XDS CC software, the sources connected to the XDS-100 are automatically displayed in the **sources window** of the XDS CC software user interface:

- the source icon is a representation of the connector type
- the source name consists of the layer name and the connector type (e.g. L1 PC, L2 DVI ...)

The **layout window** will be empty as long as no layout has been created.

#### How to launch a source from the XDS Control Center software user interface?

1. From the XDS CC software user interface sources window, click a source that is not already displayed

Image 9-24
XDS CC user interface: sources window and layouts window

2. The source will appear in a window (i.e. insertion viewer) in native resolution and native aspect ratio

**CAUTION: Read the XDS CC Software user guide or reference guide to learn more about launching sources and creating or launching layouts.**

# 10. XDS-100 ADVANCED SETTINGS

### About this chapter

Once the XDS-100 display system has been set up and configured, a lot of additional settings and features can be used to improve the image quality or to personalize the system.

- Default settings: on delivery, some default settings ease the first setup and configuration. The default settings that might be important to set up the system are listed
- Password: the access to the advanced menu items of the OSD is protected by a password. This password can be changed by the operator
- IR address: both the RCU and the XDS-100 must be set to the same IR address to allow communication. Two IR addresses can be used; both can be programmed to a different value within a specified range
- Standby timer: the system can be set to automatically switch to standby if there are no sources available for a user defined amount of time
- OSD layout: the position of the OSD items can be personalized to one's personal preferences and some message boxes can be suppressed
- Image settings: the image can be set to one's personal preferences (color, brightness, contrast, etc.)
- Source alignment: the alignment of a source (timings ...) can be done automatically or manually and some features can be used to get a new source displayed in a user defined way

### Overview


- Default settings
- Changing the password
- IR address
- Standby timer
- Display setup
- Image related settings
- Auto Image
- Image files


## 10.1 Default settings

### Default settings

A new XDS-100 unit coming out of the box has the following default settings:

- Password: **0000** (*Installation* > *Change password...*)
- Desktop: **Off** (*General* > *Desktop* > *Off*)
- IR address: **1** (*Installation* > *IR address...* > *Unique RC5 address*)
- Common IR address: **0** (*Installation* > *IR address...* > *Common RC5 address*)
- Network settings - DHCP: **On** (*Installation* > *Network Settings...* > *Use DHCP*)
- Network settings - Hostname: **X<serial number>** (*Installation* > *Network Settings...* > *DHCP settings* > *Hostname*)

## 10.2 Changing the password

### Introduction

When the OSD is launched, the basic menu items of the drop down menus are accessible only. Below the menu separator of a drop down box, *More...* is indicating that advanced menu items are available, but hidden. A password is needed to get these advanced menu items displayed. This password can be changed to the owner's preferences in a range from **0000 to 9999**.

### How to change the password?

1. In the OSD, navigate to *Installation* > *Change password...*

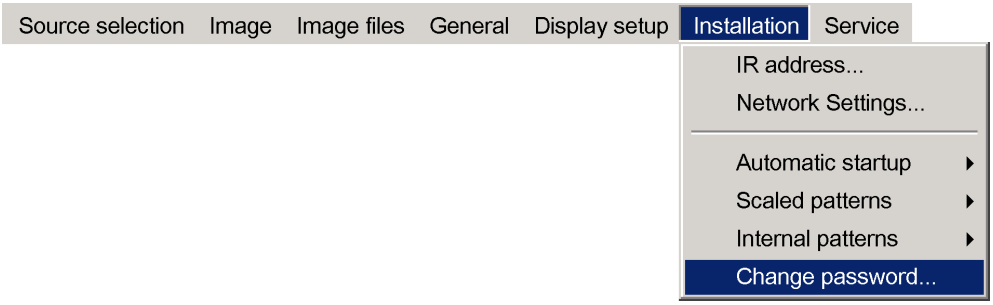


Image 10-1

2. Press **ENTER** to confirm

   A dialog box is displayed.

Image 10-2

3. Navigate to the edit box under *Enter old password* and enter the old password
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character, or press the desired digit button on the RCU
4. Navigate to the edit box under *Enter new password* and enter the new password
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character, or press the desired digit button on the RCU
5. Navigate to the exit box under *Confirm new password* and confirm the new password by entering it again
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character, or press the desired digit button on the RCU
6. Press **BACK** to return one step in the menu or press **ENTER** to exit the menu

## 10.3 IR address

### Introduction

The XDS-100 has two different IR addresses

- Unique RC5 address
- Common RC5 address.

By default, the **common RC5 address** is set to **0**, but it can be set to **1** as well to avoid interaction with other devices, programmed to the same IR address.

The **unique RC5 address** must have a value in the range 0 to 255. However it must be taken into account that the standard RCU address can only be set to a value in the range 0 to 9.

The IR address must be set to enable communication between RCU and XDS-100: both must have the same unique RC5 address

### How to set the IR address in the XDS-100?

1. In the OSD, navigate to *Installation > IR address...*

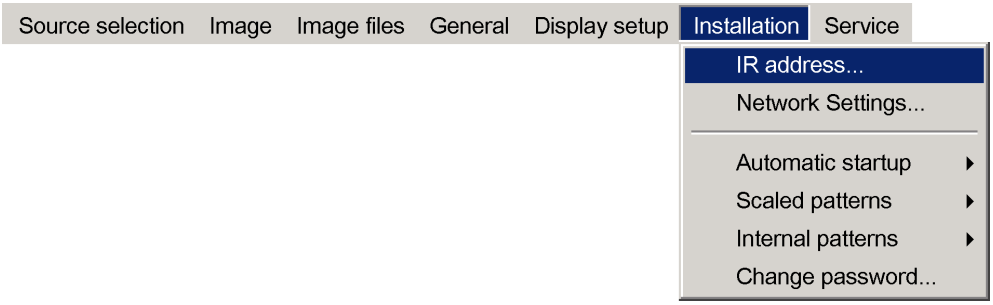


Image 10-3

2. Press **ENTER** to select

   A dialog box appears.

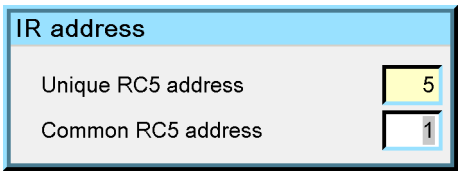


Image 10-4

3. In the dialog box, use ▲ or ▼ to select the field that must be changed and press **ENTER** to confirm
4. Enter the desired IR address:
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character, or press the desired digit button on the RCU
5. Confirm the IR address by pressing **ENTER**
6. press **BACK** to return one step in the menu or press **MENU** to leave the menu

## 10.4 Standby timer

### What can be done ?

If there is no source sync signal present, and the standby timer is enabled, a dialog box is displayed after a predefined amount of time indicating that the XDS-100 will automatically switch to standby.

The countdown time can be set in a range from 180 to 3600 seconds (default value = 300). The standby timer can also be disabled.

### How to enable (or disable) and set the timer ?

1. On the RCU, press **MENU**
2. Navigate to *General* > *Standby timer...*

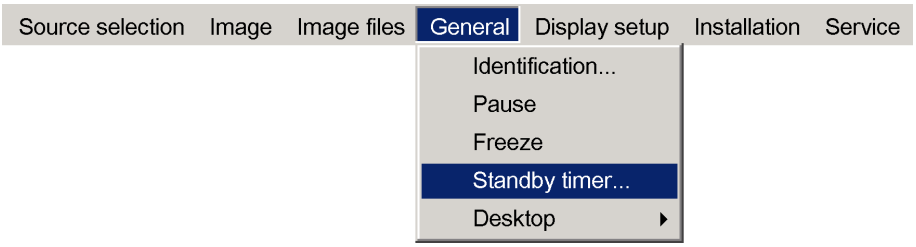


Image 10-5

3. Press **ENTER** to select

A dialog box is displayed

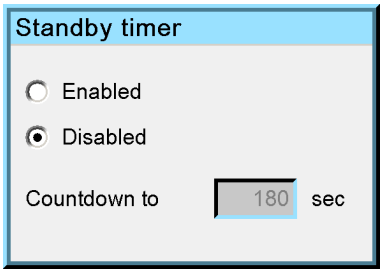


Image 10-6

4. Use ▲ or ▼ to select the radio button *Enabled* (or *Disabled*) and press **ENTER** to activate
5. If the standby timer is enabled, use ▼ to go the edit box
6. Press **ENTER** to activate it
7. Enter the desired countdown value:
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character, or press the desired digit button on the RCU
8. Press **ENTER** to confirm
9. Use **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.5 Display setup

### Overview

- Warning Messages
- Textbox
- Menu bar position
- Status bar position
- Slider box position
- Auto Image setup

### 10.5.1 Warning Messages

### Introduction

It is possible to hide warning messages during runtime. Only during startup of the XDS-100 they will be displayed if any. The table below gives an overview of the messages that can be suppressed during runtime.

| Warning message | Description |
|---|---|
| No signal | In case no incoming Sync is detected |
| Desktop resolution not valid | Desktop input signal is different from HDTV @ 60Hz or WUXGA @ 60Hz |
| Wait box | A hourglass icon that is displayed during processing |

### How to enable or disable Warning Messages?

1. In the OSD, navigate to *Service* > *Operation Options* > *Warning Messages* > *On* or *Off*

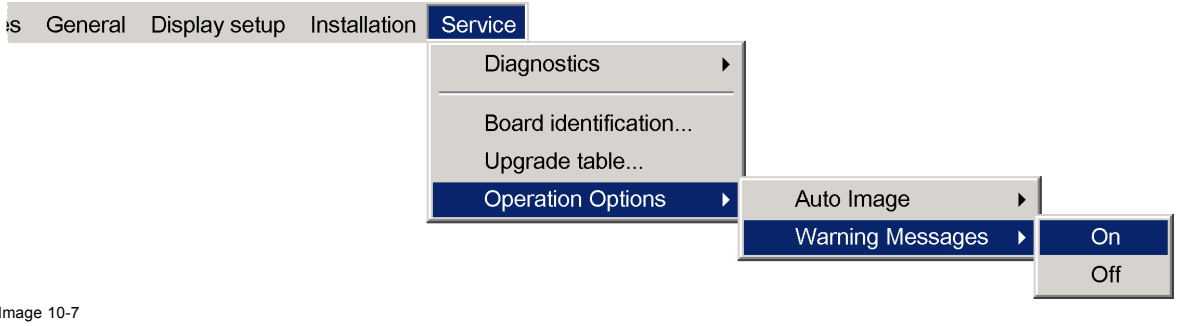


Image 10-7

2. Press **ENTER** to activate your choice
3. Press **BACK** to return one step in the menu or press **ENTER** to exit the menu

## 10.5.2 Textbox

### Introduction

Some text boxes can be blocked by switching off *Textbox*. The list below is a summary of the text boxes that will be hidden when *Textbox* has been set to *Off*

- Identification box on startup of the XDS-100
- Slider boxes in case of the use of the RCU's shortcut keys (e.g. Contrast, Brightness ...)

### How to enable or disable Text boxes?

1. In the OSD, navigate to *Display setup* > *TextBox* > *On* or *Off*

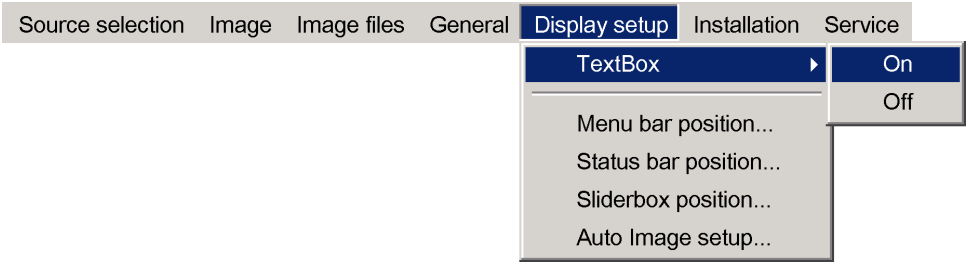


Image 10-8

2. Press **ENTER** to activate your choice
3. Press **BACK** to return one step in the menu or press **ENTER** to exit the menu

## 10.5.3 Menu bar position

### Introduction

By default, the position of the menu bar is at the top of the display. It can however be lowered. The lowest position is at 2/3 of the total height of the display.

### How to change the menu bar position?

1. In the OSD, navigate to *Display setup* > *Menu bar position...*

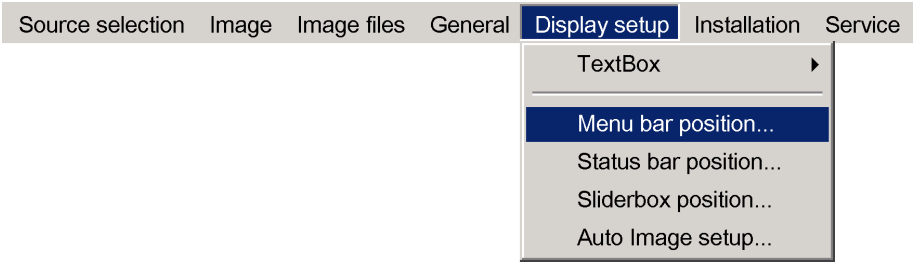


Image 10-9

2. Press **ENTER** to activate this menu item
3. Use ▲ or ▼ to move the menu bar to the desired position
4. Confirm with **ENTER** or cancel with **BACK**

## 10.5.4 Status bar position

### Introduction

By default, the position of the status bar is at the bottom of the display. It can however be lifted. The highest position is at 1/3 of the total height of the display.

### How to change the status bar position?

1. In the OSD, navigate to *Display setup* > *Status bar position...*

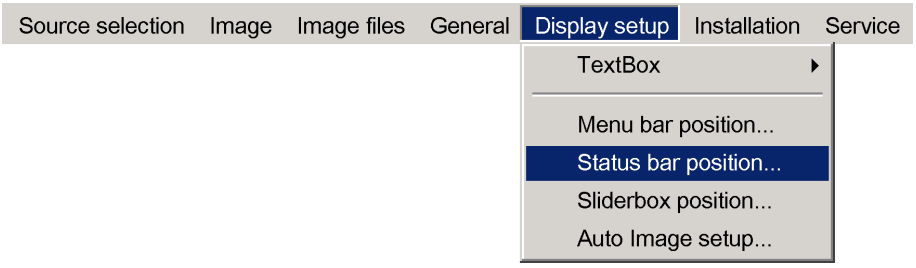


Image 10-10

2. Press **ENTER** to activate this menu item
3. Use ▲ or ▼ to move the status bar to the desired position
4. Confirm with **ENTER** or cancel with **BACK**

### 10.5.5 Slider box position

#### Introduction

By default, the position of a slider box is at the right bottom corner of the display. It can however be positioned anywhere on the display.

#### How to change the slider box position?

1. In the OSD, navigate to *Display setup > Slider box position...*

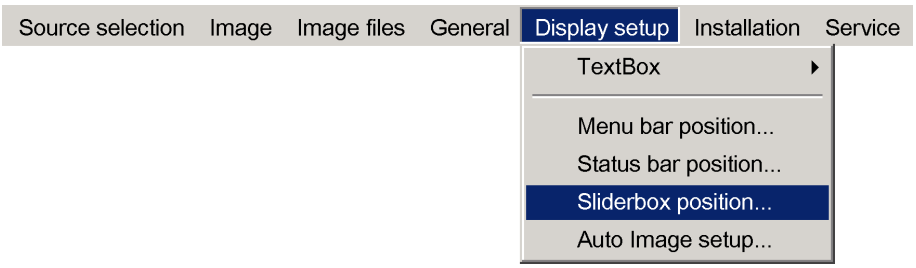


Image 10-11

2. Press **ENTER** to activate this menu item
3. Press **ENTER** to cycle from coarse positioning to fine positioning and back again
   - coarse positioning:
     - each horizontal step is 440 pixels
     - each vertical step is 100 pixels
   - fine positioning
     - each horizontal step is 1 pixel
     - each vertical step is 1 pixel
4. Use ▲, ▼, ◄ or ► to move the slider box to the desired position
5. Confirm with **ENTER** or cancel with **BACK**

### 10.5.6 Auto Image setup

#### Auto Image setup

See "Auto Image", page 83.

## 10.6 Image related settings

### Overview

- Pause
- Freeze
- Contrast
- Brightness
- Color (on video signals only)
- Tint (on NTSC signals only)
- Sharpness (on video signals only)
- Gamma
- Phase (on analog RGB signals only)
- Noise reduction (on analog signals only)
- Gain control (on video signals only)
- Aspect ratio
- Color temperature
- Input balance (on analog RGB signals only)

**Although the OSD can be used to control image settings, the system user will normally use XDS CC software to do so!**

### Introduction

Image related settings is a collection of different groups of features:

- **actions** for the convenience of the operator: e.g. Pause, Freeze
- features to improve the **image quality**: Sharpness, Phase, Noise reduction, Gain control, Input balance
- settings to adapt the image view to the operator's **personal preferences**: e.g. Contrast, Brightness, Color, Tint, Gamma, Aspect ratio, Color temperature

### 10.6.1 Pause

#### Introduction

The XDS-100 can be put to pause. This is: a black image will be displayed. This action can be done through the OSD or via the direct **PAUSE** key on the RCU.

**Getting the image displayed back again (i.e. un-pause the unit) can only be done by pressing PAUSE on the RCU!**

#### How to put the XDS-100 to pause?

1. In the OSD, navigate to *General* > *Pause*

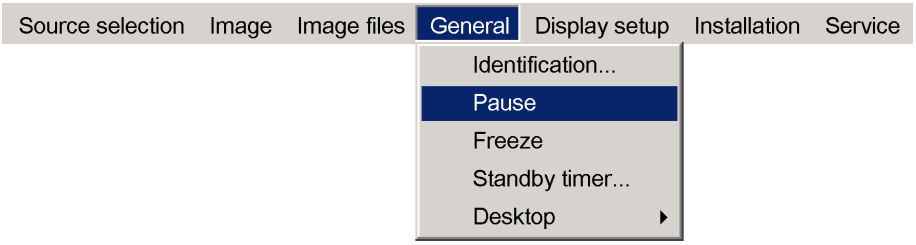


Image 10-12

2. Confirm by pressing **ENTER**

## 10.6.2 Freeze

### Introduction

A source image of the XDS-100 can be put to freeze. If the source is displayed full screen, it willl be fully set to freeze. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be frozen. This action can be done through the OSD or via the direct **FREEZE** ⏸ key on the RCU.

### How to freeze the image of a source on the XDS-100?

1. In the OSD, navigate to *General* > *Freeze*

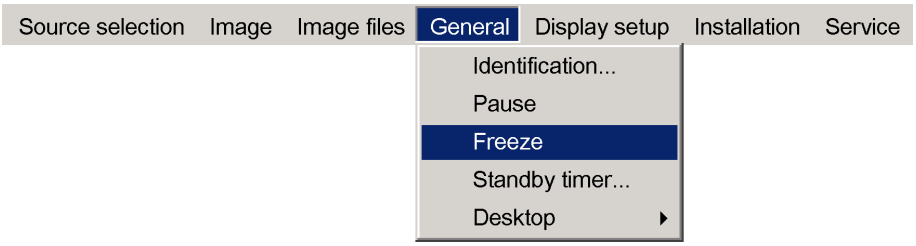


Image 10-13

2. Confirm by pressing **ENTER**
   ***Note:*** *Perform the same action to un-freeze the image again.*

## 10.6.3 Contrast

### Introduction

The contrast of the displayed source image can be adapted to the wishes of the operator. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the contrast of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed. This action can be done through the OSD or via the direct **CONTR +/-** key on the RCU.

### How to set the contrast?

1. In the OSD, navigate to *Image* > *Settings* > *Contrast...*

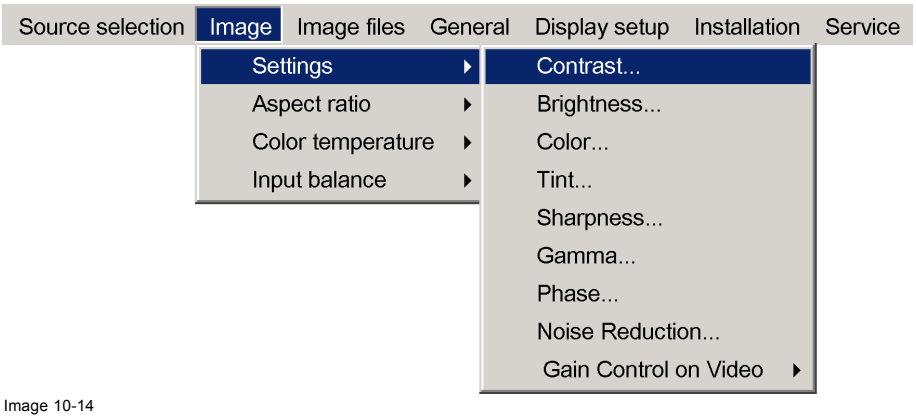


Image 10-14

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

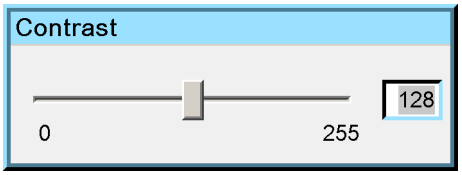


Image 10-15

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.4 Brightness

### Introduction

The brightness of the displayed source image can be adapted to the wishes of the operator. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the brightness of the highest priority window or the selected window (via

**PIP ADJUST** on the RCU) will be changed. This action can be done through the OSD or via the direct **BRIGHTN +/-** key on the RCU.

### How to set the brightness?

1. In the OSD, navigate to *Image* > *Settings* > *Brightness...*

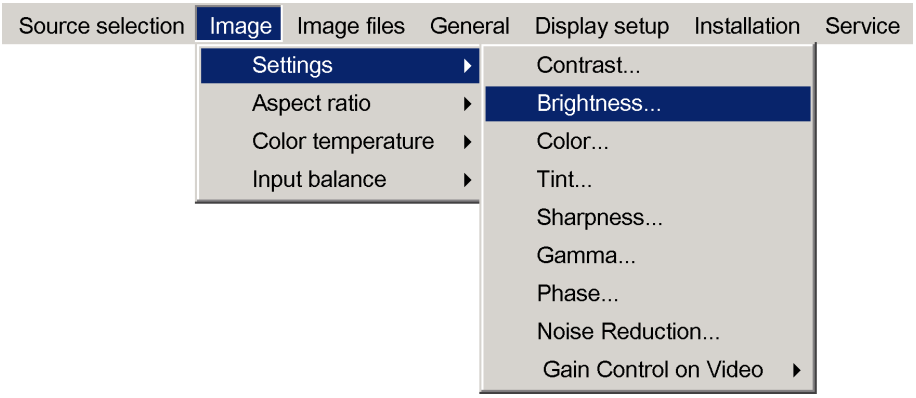


Image 10-16

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

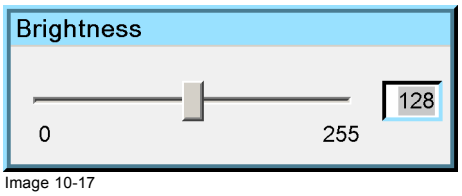


Image 10-17

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.5 Color (on video signals only)

### Introduction

In case of a **video or S-video source**, the color of the displayed source image can be adapted to the wishes of the operator. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the color of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed. This action can be done through the OSD or via the direct **COLOR +/-** key on the RCU.

### How to set the color?

1. In the OSD, navigate to *Image* > *Settings* > *Color...*

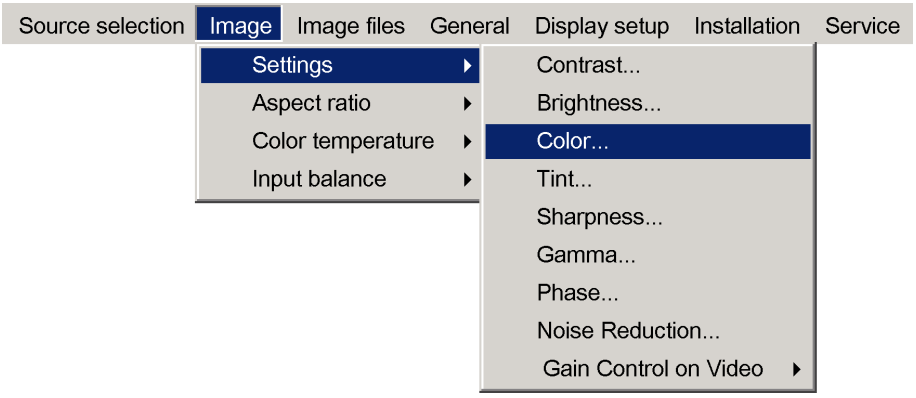


Image 10-18

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

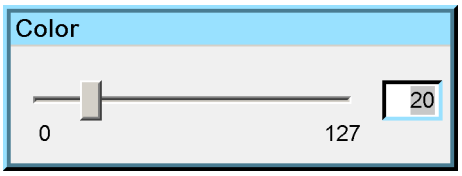


Image 10-19

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.6.6 Tint (on NTSC signals only)

#### Introduction

In case of a **NTSC video source**, the color of the displayed source image can be adapted to the wishes of the operator. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the color of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed. This action can be done through the OSD or via the direct **TINT +/-** key on the RCU.

#### How to set the color on a NTSC video source?

1. In the OSD, navigate to *Image* > *Settings* > *Tint...*

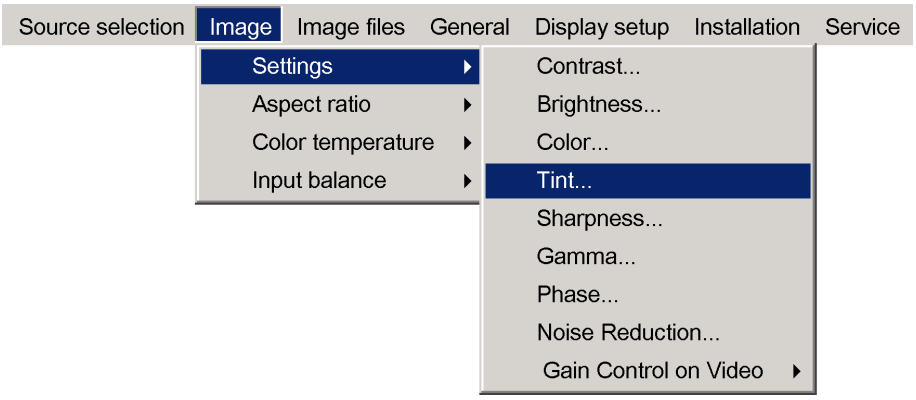


Image 10-20

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

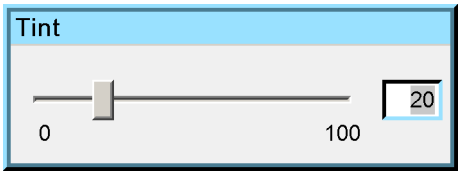


Image 10-21

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.6.7 Sharpness (on video signals only)

#### Introduction

In case of a **video or S-video source**, the sharpness of the displayed source image can be adapted to get the best image quality. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the sharpness of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed.

#### How to set the sharpness?

1. In the OSD, navigate to *Image* > *Settings* > *Sharpness...*

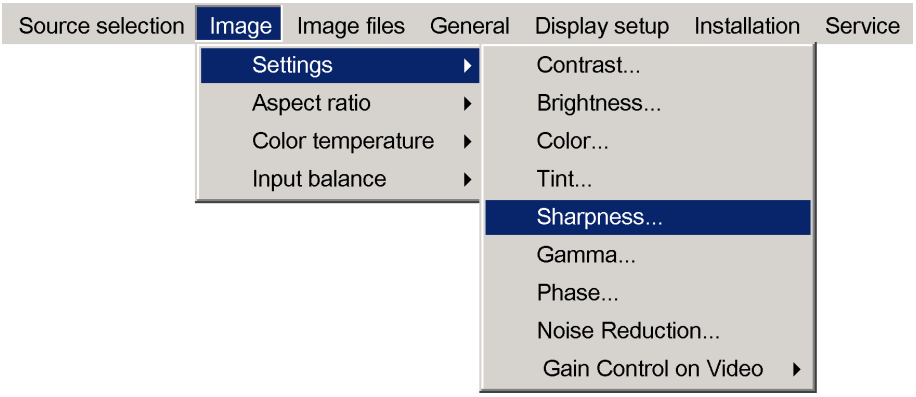


Image 10-22

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

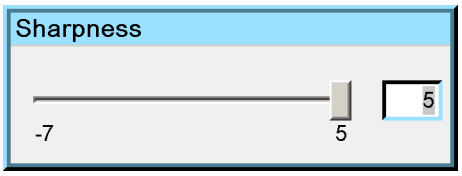


Image 10-23

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.8 Gamma

### Introduction

The gamma (grey mid-tones correction value) of the displayed source image can be adapted to the wishes of the operator. The setting of gamma is determined by the image generator, but the operator however is free to chose the value to his wishes. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the gamma of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed.

### How to set the gamma?

1. In the OSD, navigate to *Image* > *Settings* > *Gamma...*

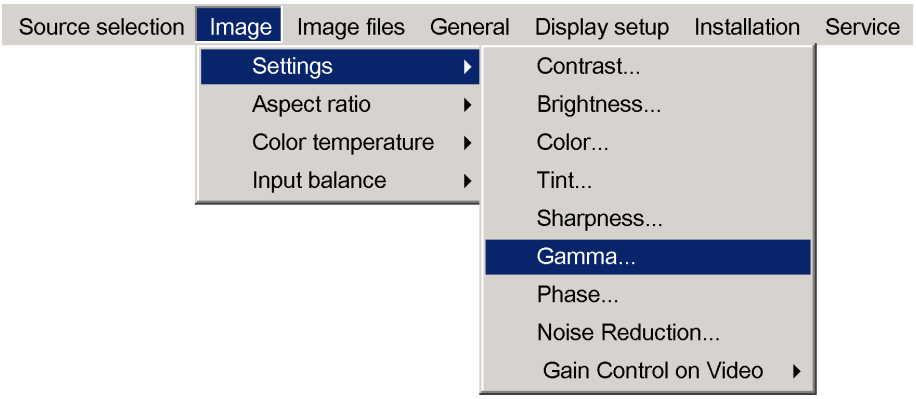


Image 10-24

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

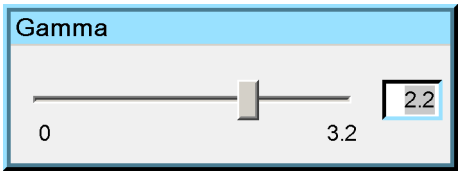


Image 10-25

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.9 Phase (on analog RGB signals only)

### Introduction

On analog RGB signals, the phase of the sample signal of the displayed source image can be changed to get a good quality image. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the phase of the sample signal of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed.

### How to set the phase?

1. In the OSD, navigate to *Image* > *Settings* > *Phase...*

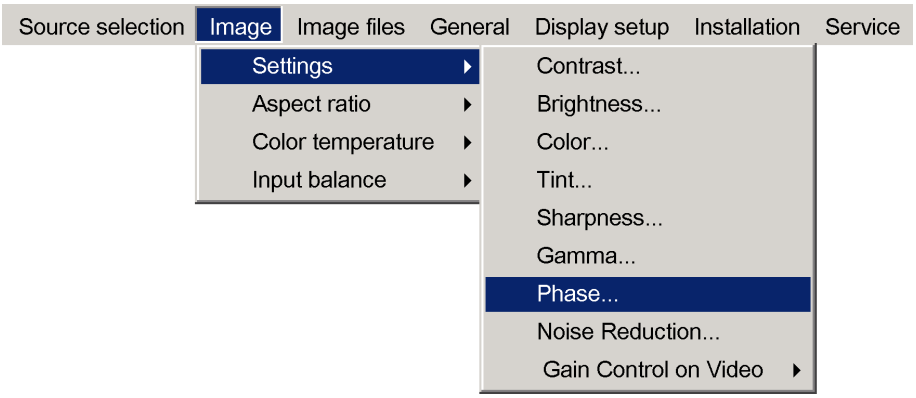


Image 10-26

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

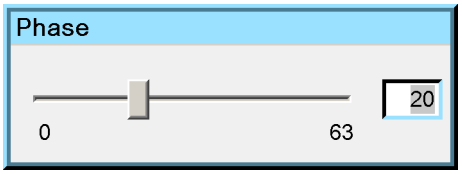


Image 10-27

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.10 Noise reduction (on analog signals only)

### Introduction

In case of an **analog source**, the noise of the displayed source image can be reduced to get the best image quality. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the noise of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be reduced.

### How to reduce the noise on a video image?

1. In the OSD, navigate to *Image* > *Settings* > *Noise reduction...*

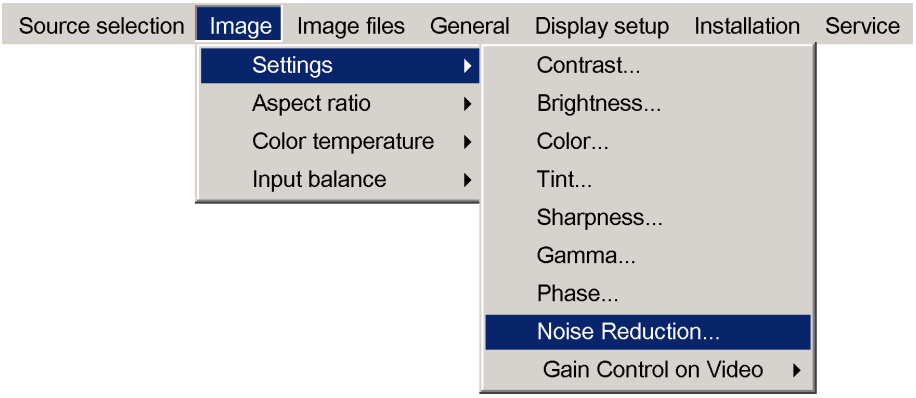


Image 10-28

2. Confirm by pressing **ENTER**
3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

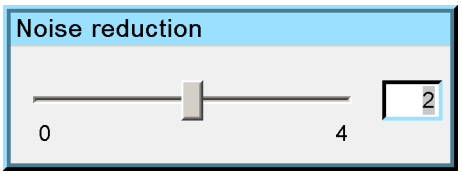


Image 10-29

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.11 Gain control (on video signals only)

### Introduction

In case of a **video or S-video source**, the gain (amptlitude) of the displayed source image is by default automatically controlled by the XDS-100. However it can be manually adapted to get the best image quality. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the gain of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) can be changed.

### Overview

- Enabling / disabling the automatic gain control
- Setting the gain control manually

## 10.6.11.1 Enabling / disabling the automatic gain control

### How to enable or disable the automatic gain control?

1. In the OSD, navigate to *Image* > *Settings* > *Gain control on video...* > *Auto* > *On (or Off)*

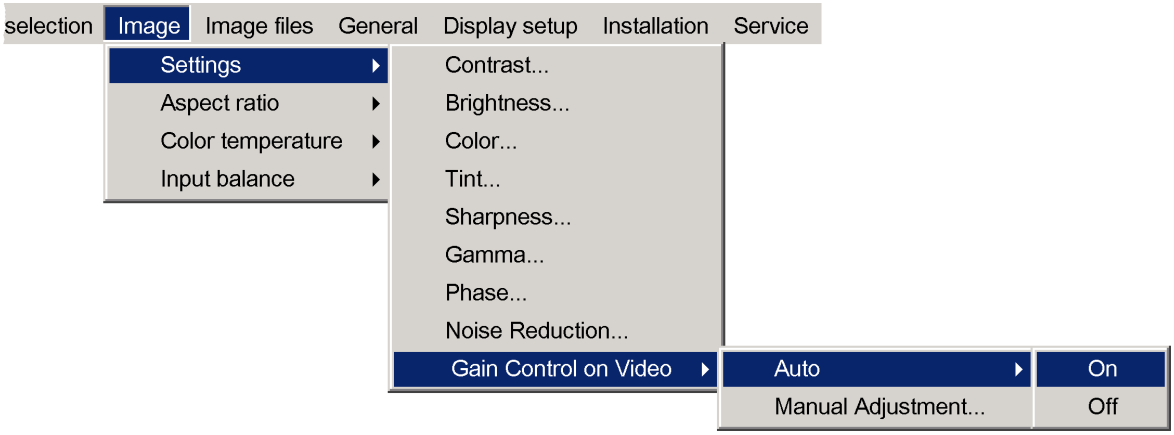


Image 10-30

2. Confirm your choice by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.11.2 Setting the gain control manually

### How to set the gain control manually?

Automatic gain control must be set to Off first!

1. In the OSD, navigate to *Image* > *Settings* > *Gain control on video...* > *Manual adjustment...*

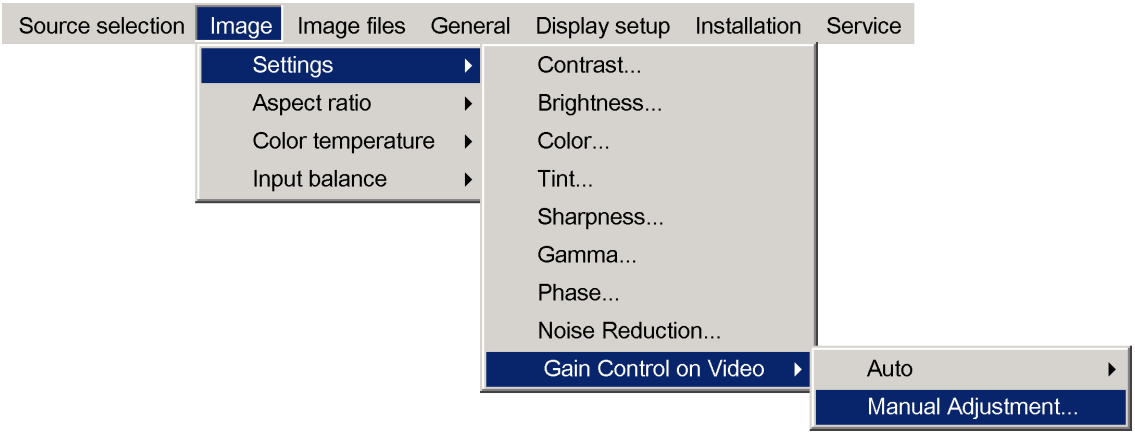


Image 10-31

2. Confirm by pressing **ENTER**

3. Use the arrows ◄ or ► to move the slider or enter a new value in the edit box

Image 10-32

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.12 Aspect ratio

### Introduction

By default, the aspect ratio (i.e. image width : image height) is set to automatic, which means that if a source is selected to be displayed, it pops up in native aspect ratio. Some aspect ratios are very common:

- 4:3 – e.g. SXGA+ (1400 x 1050 pixels); UXGA (1600 x 1200 pixels)
- 16:9 – e.g. HDTV (1900 x 1080 pixels)
- 16:10 – e.g. WUXGA (1920 x 1200 pixels)
- 5:4 – e.g. SXGA (1280 x 1024 pixels)

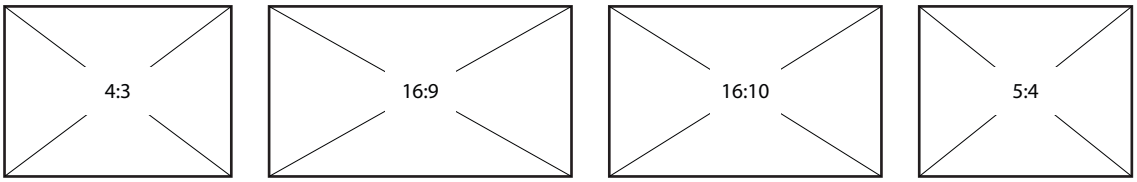


Image 10-33
Commonly used aspect ratios

In the case where a source is displayed full screen, black borders can appear at the top/bottom or at the sides of the image to maintain the native aspect ratio.

The aspect ratio of the displayed image can be changed manually: one of the commonly used aspect ratios can be chosen from a list or a custom aspect ratio can be assigned to the source signal. If the aspect ratio is switched to a value other than the native aspect ratio, the image will be stretched or shrunk to fit the selected aspect ratio.

### How to select set the aspect ratio to automatic?

1. In the OSD, navigate to *Image* > *Aspect ratio* > *Auto*

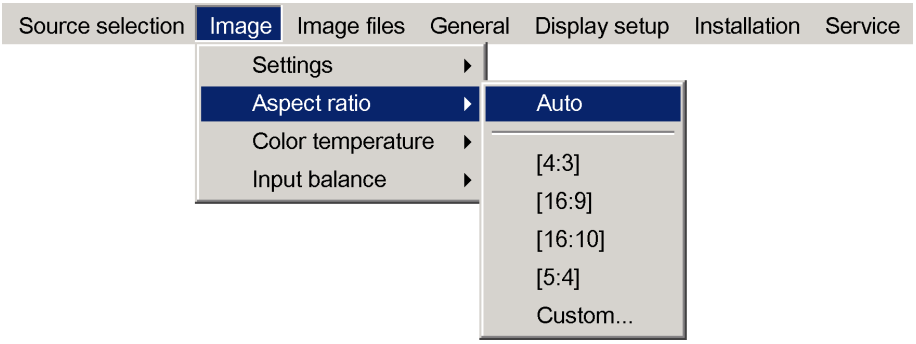


Image 10-34

2. Confirm by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### How to select an aspect ratio from the list?

1. In the OSD, navigate to *Image* > *Aspect ratio* > *4:3* or *16:9* or *16:10* or *5:4*

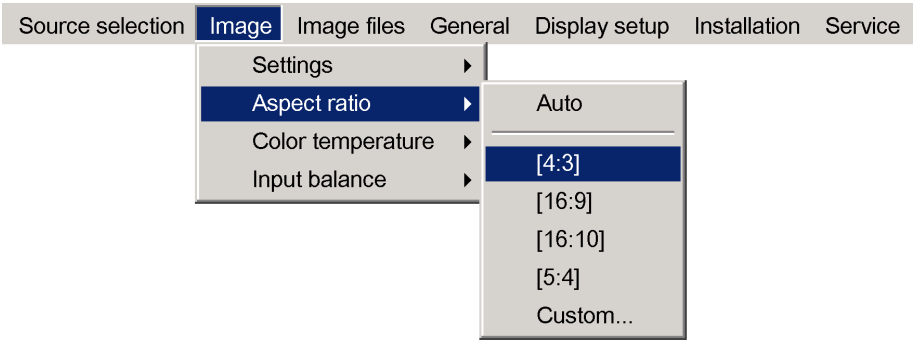


Image 10-35

2. Confirm your choice by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### How to set a custom aspect ratio?

1. In the OSD, navigate to *Image* > *Aspect ratio* > *Custom...*

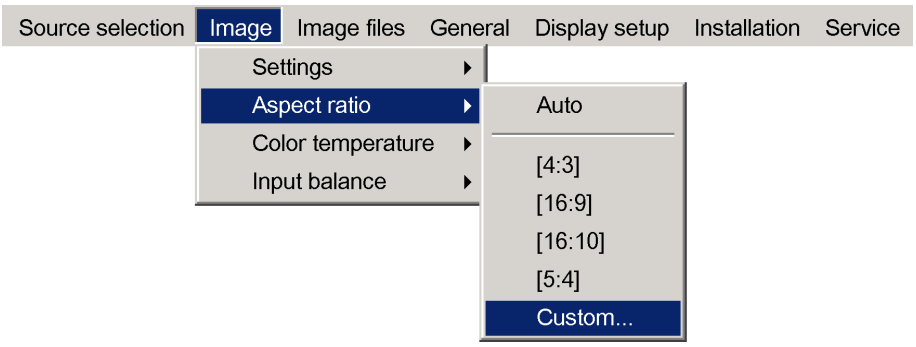


Image 10-36

2. Confirm by pressing **ENTER**
3. Use the arrows ▲ or ▼ to select the dimension to change
   - x : height of the image (in relation to width)
   - y : width of the image (in relation to height)
4. Use the arrows ◄ or ► to move the selected slider or enter a new value in the edit box

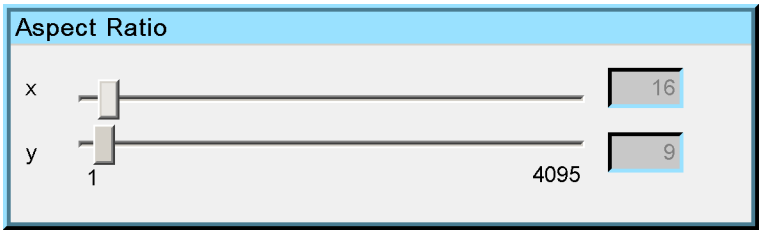


Image 10-37

5. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.13 Color temperature

### Introduction

The color temperature of the displayed source image can be adapted to the wishes of the operator. If the XDS CC software is running and some windows (source insertion viewers) are displayed, the color temperature of the highest priority window or the selected window (via **PIP ADJUST** on the RCU) will be changed.

The color temperature of the source image can be selected from a list of commonly used presets:

- Default : this enables the full capability of the display, resulting in the brightest image
- Computer: 9300K
- Video: 6500K
- Film: 5400K
- Broadcast: 3200K

### How to set the color temperature?

1. In the OSD, navigate to *Image* > *Settings* > *Color temperature* > *Default* or *Computer* or *Video* or *Film* or *Broadcast*

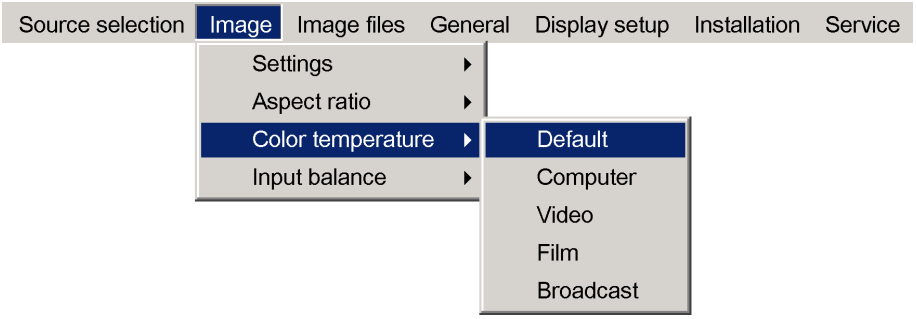


Image 10-38

2. Confirm by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.14 Input balance (on analog RGB signals only)

### Overview

- Introduction
- Enabling or disabling Automatic black level
- Adjusting the Black level
- Adjusting the White level

## 10.6.14.1 Introduction

### Introduction

In case of an analog RGB signal, each of the channels (being Red, Green and Blue) is transmitted via a separate wire. Each of the channel signals can suffer from a different degree of deterioration, due to bad connectors, bad wires, etc. As a result the colors of the image can be out of balance, i.e. the **black levels** (i.e. brightness) for each of the channels can be different and the **white levels** (i.e. contrast) for each of the channels can be different. This can result in full white showing some color or full black showing some color.

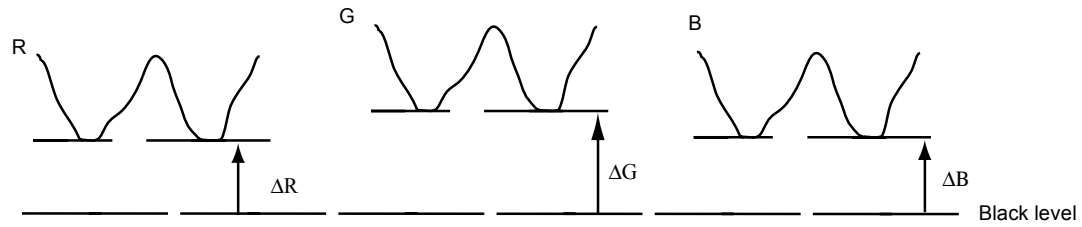


Image 10-39

Through the input balance, this phenomenon can be fully corrected:

- by switching *Automatic black level* to *On*, the black levels for each of the color channels of an analog RGB source will be forced to the same level
- black level differences can also be corrected manually in the *Black level...* menu
- white level differences can only be corrected manually in the *White level...* menu

### Adjusting the input balance: work flow

1. Optionally, set the *Automatic black level* to *On*
2. From the source, display a checkerboard pattern (black and white rectangles) or an image with white and black areas

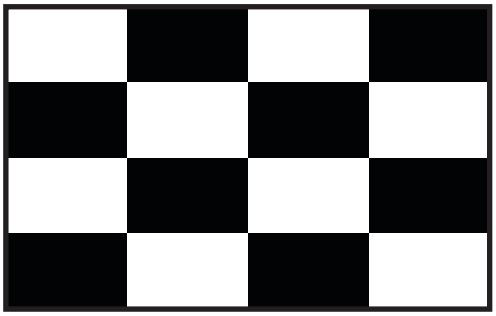

Image 10-40
Checkerboard pattern

3. Adjust the Black level (only if *Automatic black level* is *Off*)
4. Adjust the White level
5. Check Black level and readjust if needed (only if *Automatic black level* is *Off*)

## 10.6.14.2 Enabling or disabling Automatic black level

### How to enable or disable Automatic black level?

1. In the OSD, navigate to *Image* > *Input balance* > *Automatic black level* > *On* or *Off*

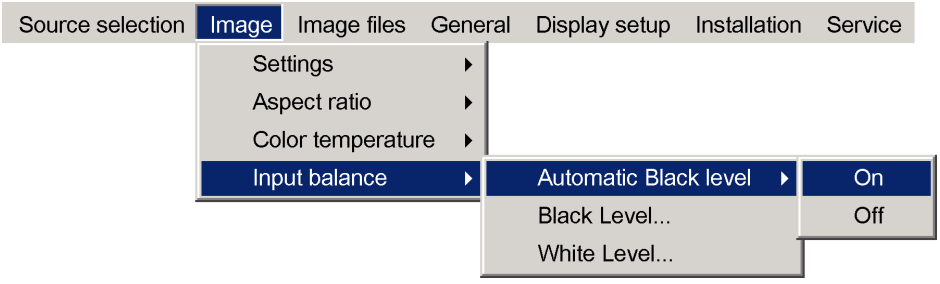


Image 10-41

2. Confirm by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.6.14.3 Adjusting the Black level

**While adjusting the Black level, only consider the black areas on the pattern.**

## How to adjust the Black level?

1. From the source, launch a checkerboard pattern (black and white rectangles).
2. In the OSD, navigate to *Image* > *Input balance* > *Black level...*

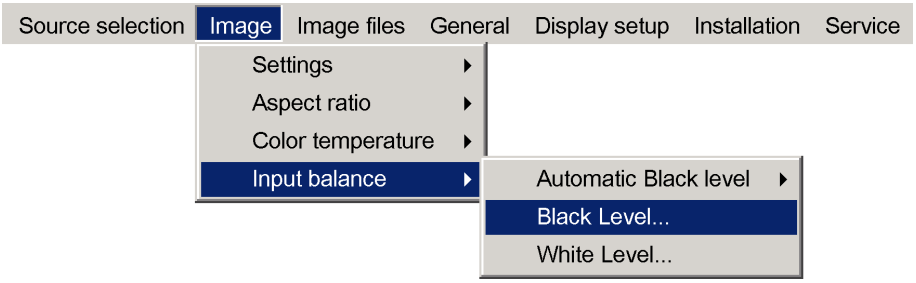


Image 10-42

3. Press **ENTER** to confirm
4. Move the slider or use the edit box to adjust the Red black level to a minimal value (e.g. < 20)

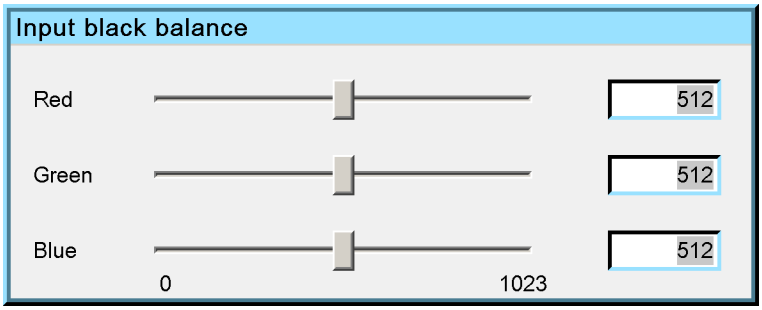


Image 10-43

5. Move the slider or use the edit box to adjust the Green black level to a minimal value (e.g. < 20)
6. Move the slider to adjust the Blue black level until bright spots appear/disappear on the black areas of the displayed pattern

   If the black areas look black, increase the value. If they look uniform blue, decrease the value.

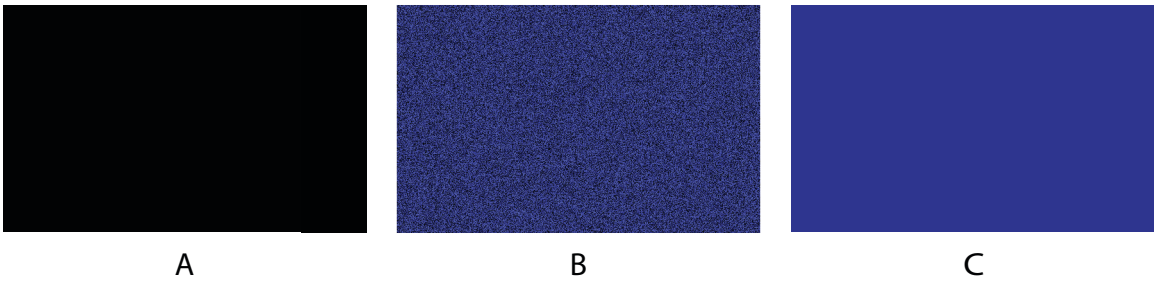


Image 10-44
Input balance: Black level adjustment on blue

A Black level is too low
B Black level is good
C Black level is too high

7. Move the slider to adjust the Green black level to the center of the range (approx. 512)
8. Move the slider to adjust the Green black level until bright spots appear/disappear on the black areas of the displayed pattern

If the black areas look black, increase the value. If they look uniform green, decrease the value.

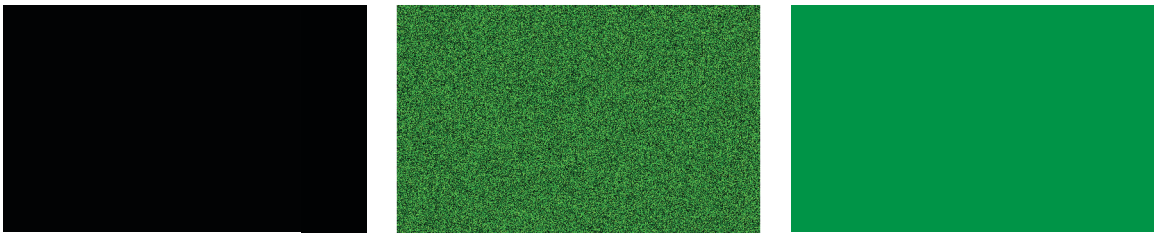


Image 10-45
Input balance: Black level adjustment on green

A Black level is too low
B Black level is good
C Black level is too high

9. Move the slider to adjust the Red black level to the center of the range (approx. 512)
10. Move the slider to adjust the Red black level until bright spots appear/disappear on the black areas of the displayed pattern

    If the black areas look black, increase the value. If they look uniform red, decrease the value.

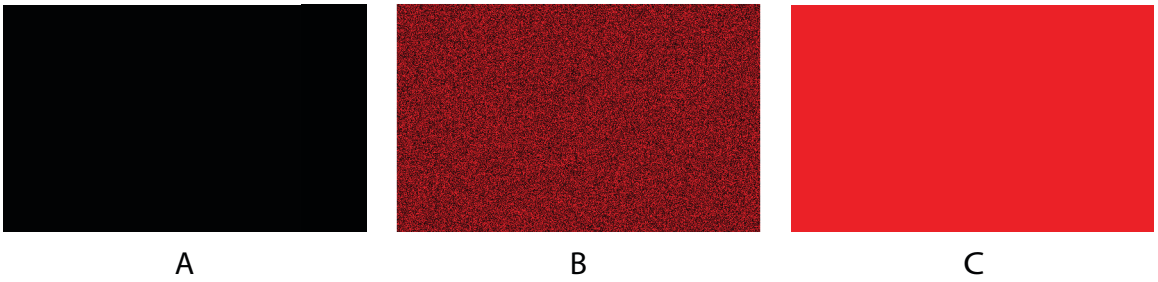


Image 10-46
Input balance: Black level adjustment on red

A Black level is too low
B Black level is good
C Black level is too high

### 10.6.14.4 Adjusting the White level

**While adjusting the White level, the white areas on the pattern must be considered.**

#### How to adjust the White level?

1. From the source, launch a checkerboard pattern (black and white rectangles).
2. In the OSD, navigate to *Image* > *Input balance* > *White level...*

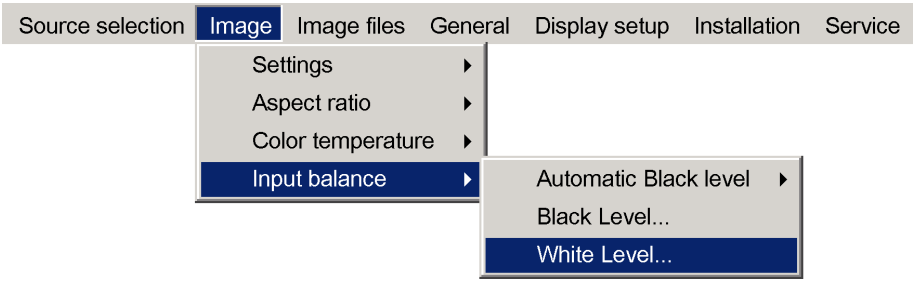


Image 10-47

3. Press **ENTER** to confirm
4. Move the slider or use the edit box to adjust the Red white level to a minimal value (e.g. < 10)

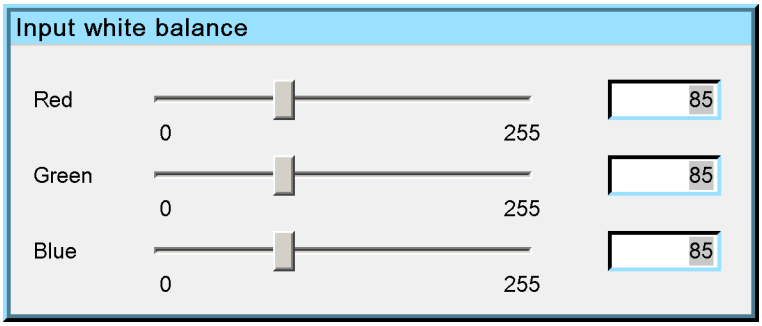


Image 10-48

5. Move the slider or use the edit box to adjust the Green white level to a minimal value (e.g. < 10)
6. Move the slider to adjust the Blue white level until bright spots appear/disappear on the white areas of the displayed pattern
   If the white areas look dark blue, increase the value. If they look pale blue, decrease the value.

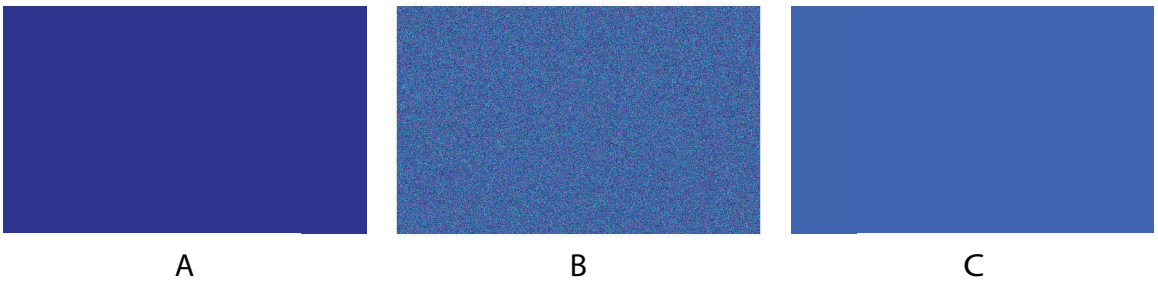


Image 10-49
Input balance: White level adjustment on blue

A Black level is too low
B Black level is good
C Black level is too high

7. Move the slider to adjust the Green white level to the center of the range
8. Move the slider to adjust the Green white level until bright spots appear/disappear on the white areas of the displayed pattern
   If the white areas look dark green, increase the value. If they look pale green, decrease the value.

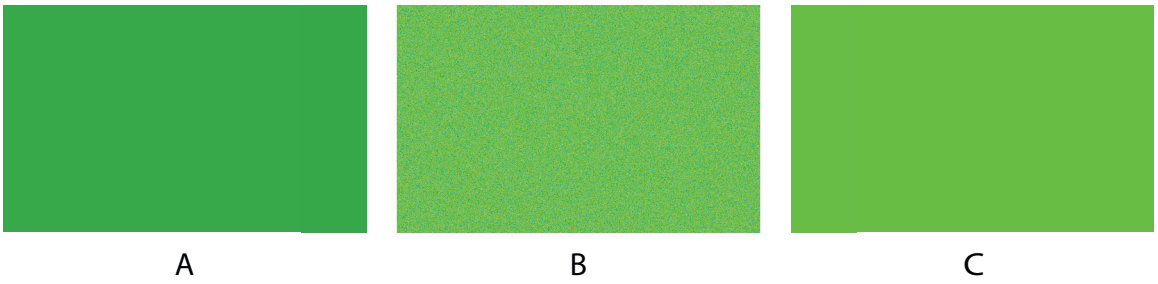


Image 10-50
Input balance: White level adjustment on green

A Black level is too low
B Black level is good
C Black level is too high

9. Move the slider to adjust the Red white level to the center of the range

10. Move the slider to adjust the Red white level until bright spots appear/disappear on the white areas of the displayed pattern

If the white areas look dark red, increase the value. If they look pale red, decrease the value.

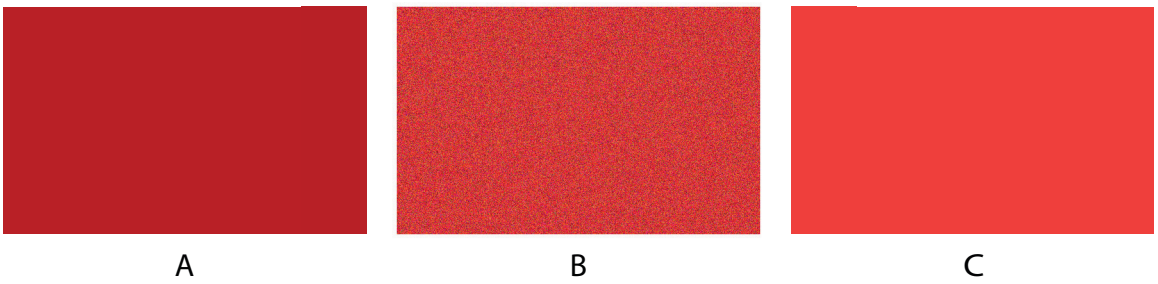


Image 10-51
Input balance: White level adjustment on red

A Black level is too low
B Black level is good
C Black level is too high

## 10.7 Auto Image

### Introduction

If a connected source signal has never been plugged to a particular connector of the XDS-100 before and it is selected to be displayed for the first time, **Auto Image** will fully scan the signal, make a copy of the best fitting Standard Image file, thus creating a **Custom Image file**, and adjust it to make it fully adapted to the source signal. The Auto Image process can also be started by the operator at any time by pressing **Auto Image** on the RCU (full scan only) or by selecting the according menu item in the OSD (Full scan or Limited scan). The Auto Image **limited** scan level can be altered by the operator, by which the scan time can be limited. Auto Image can also be disabled.

**Auto Image works best if the displayed image has a bright content!**

### How to manually start Auto Image (Full scan or Limited scan)?

1. In the OSD, navigate to *Image files* > *Auto Image...* > *Limited scan* or *Full scan*

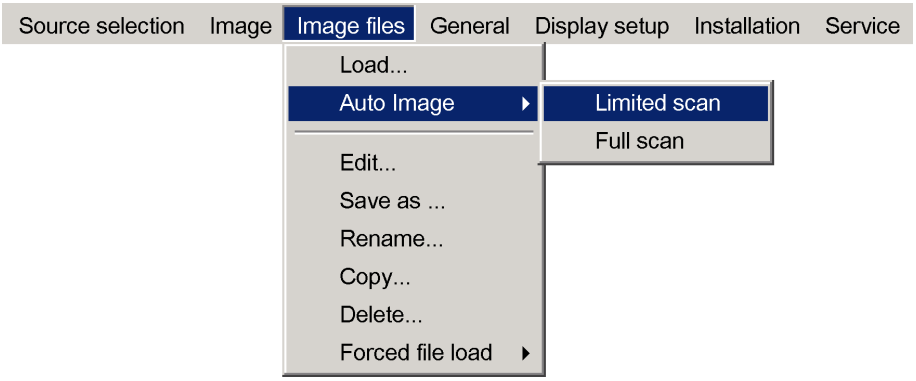


Image 10-52

2. Confirm by pressing **ENTER**

   A message box will indicate that the Auto Image process is ongoing. The image itself will move within its window (or full screen) during this process.

3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## How to set the Limited scan level?

1. In the OSD, navigate to *Display setup* > *Auto Image setup...*

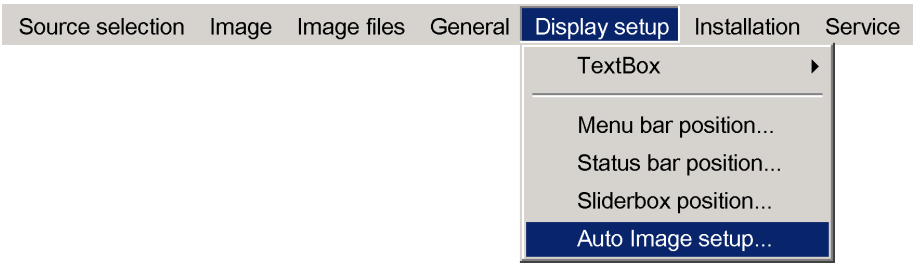


Image 10-53

2. Confirm by pressing **ENTER**
3. In the dialog box, check or uncheck the boxes according to your wishes:

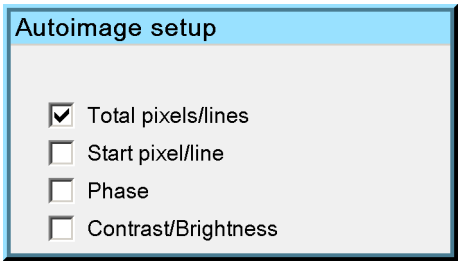


Image 10-54

4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## How to enable or disable Auto Image?

1. In the OSD, navigate to *Service* > *Operation options* > *Auto Image* > *On* or *Off*

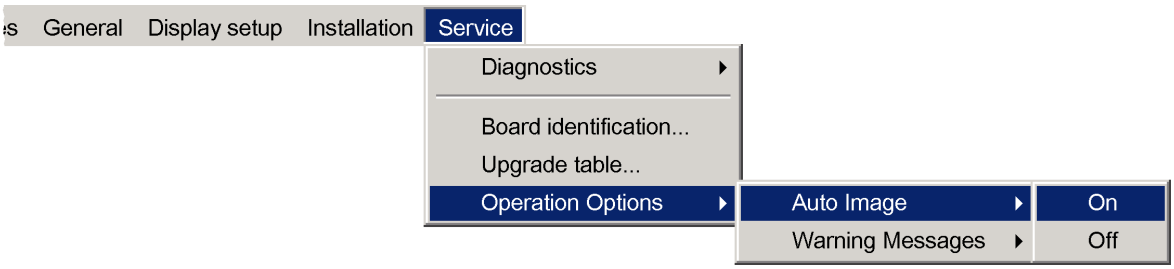


Image 10-55

2. Confirm by pressing **ENTER**
3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

# 10.8 Image files

## Overview

- Introduction
- Load
- Save as
- Rename
- Copy
- Delete
- Edit
- Forced file load

## 10.8.1 Introduction

### Description

An Image file contains the main characteristics of a source signal. The XDS-100 needs that kind of data to be able to display the source in the best way. The XDS-100 has a library of **Standard Image files** that covers most of the commonly used source signal formats and timings.

While selecting a source to be displayed, the XDS-100 uses an Image file to display the source signal.

If a connected source signal has never been plugged to a particular connector of the XDS-100 before and it is selected to be displayed, **Auto Image** will fully scan the signal, make a copy of the best fitting Standard Image file, thus creating a **Custom Image file**, and adjust it to make it fully adapted to the source signal. The Auto Image process can also be started by the operator at any time by pressing **Auto Image** on the RCU (full scan only) or by selecting the according menu item in the OSD (Full scan or Limited scan). The Auto Image **limited** scan level can be altered by the operator, by which the scan time can be limited. Auto Image can also be disabled.

When a source signal has been displayed from the same input connector before, the XDS-100 will recognize it and it will use **the same Custom Image file** that has been created before. This means that no more Auto Image will be performed.

The Custom Image files can be adjusted by the operator as well to make the source image being fully displayed (no pixels or lines missing) and to make it look as good as possible.

The name of a Standard Image file or an automatically generated Custom Image file has the following format: `FileType/FileName.xml`, where `FileType` is **Custom** or **Standard** and `Filename` is a random name. A good practice is to include resolution and vertical refresh rate in the filename.

It is possible to perform the following tasks:

- *Load...*: the operator manually loads an image file for the selected source from the list of Custom Image files
- *Auto Image*: to start the Auto Image process (*Full scan* or *Limited scan*)
- *Edit...*: to manually change the parameters of the Custom Image file
- *Save as...*: to create a new Custom Image file
- *Rename...*: to rename a Custom Image file
- *Copy...*: to copy an existing Custom Image file, edit it and save it with a different name
- *Delete...*: to delete some or all Custom Image files
- *Force file load*: to force a certain Custom Image file to be loaded when a random source signal on a specified input layer and input connector is selected to be displayed

## 10.8.2 Load

### Introduction

When a source is displayed, the operator can manually load a Custom Image file to display the concerning source. In normal operation, the file selection is done automatically by **Auto Image**.

**No Custom Image file can be loaded if no source has been selected.**

### How to manually load a Custom Image file?

1. In the OSD, navigate to *Image files* > *Load...*

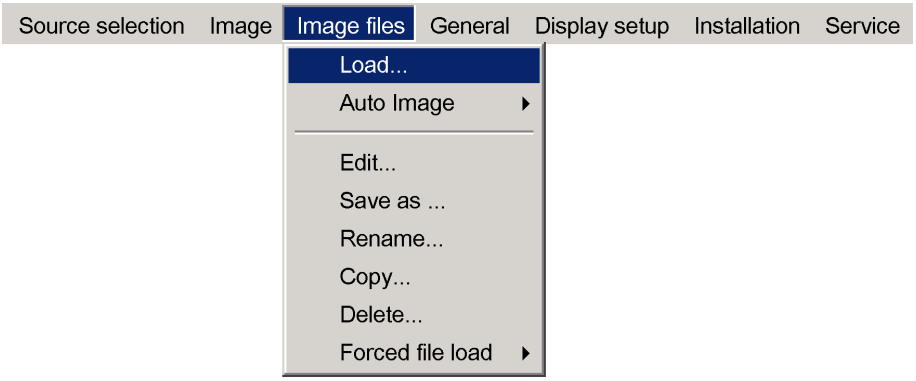


Image 10-56

2. Confirm by pressing **ENTER**
3. In the dialog box, navigate to the desired Image file

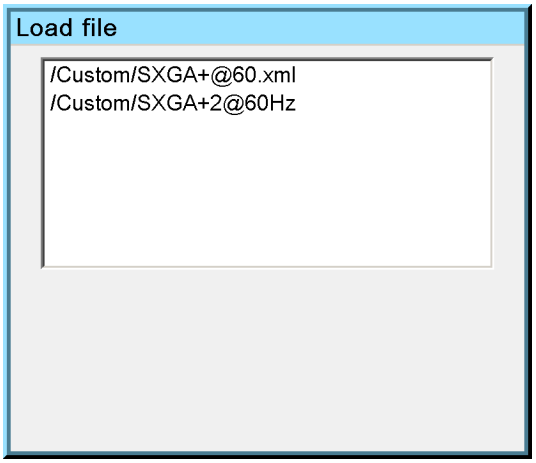


Image 10-57

4. Confirm by pressing **ENTER**
5. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.3 Save as

#### Introduction

The Custom Image file of a selected source can be saved under a new name. Basically this is done to create a new Custom Image file. To achieve this, the *Save as...* menu is to be used.

#### How to create a Custom Image file (Save as...)?

1. In the OSD, navigate to *Image files* > *Save as...*

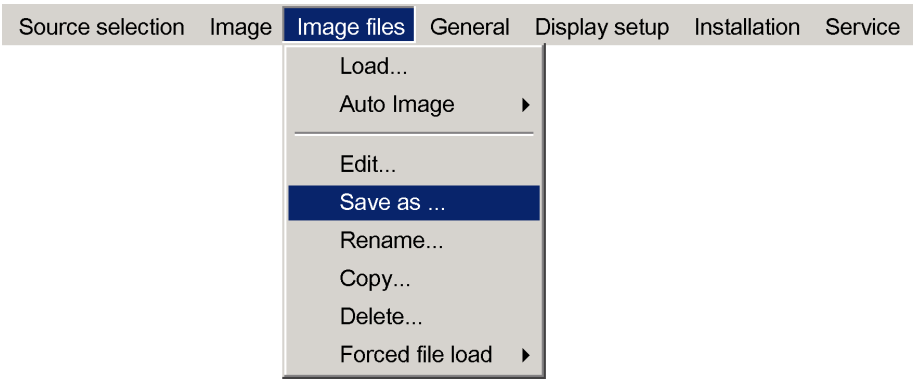


Image 10-58

2. Confirm by pressing **ENTER**
3. In the dialog box, enter the desired name for the new file:

- use ◄ and ► to select the character to be changed
- use ▲ and ▼ to change the selected character

Image 10-59

4. Confirm by pressing **ENTER**
5. A confirmation request window will appear:
   - press **ENTER** to confirm
   - press **BACK** to return
6. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.4 Rename

#### Introduction

Any Custom Image file can be renamed at any time.

#### How to rename a Custom Image file?

1. In the OSD, navigate to *Image files* > *Rename...*

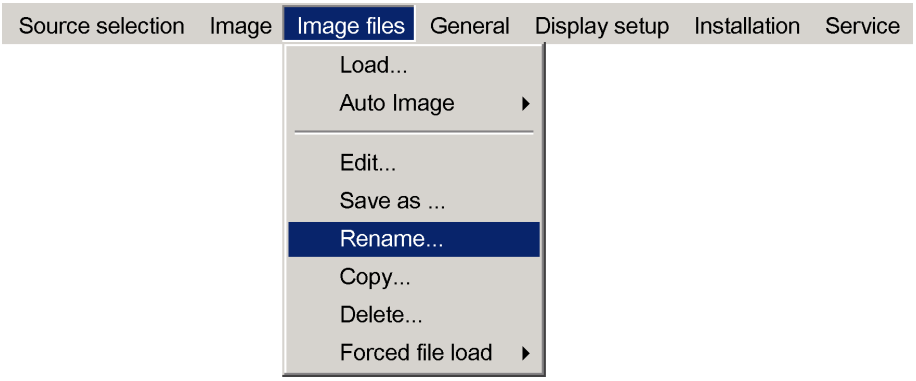


Image 10-60

2. Confirm by pressing **ENTER**
3. In the list of the dialog box, navigate to the Custom Image file that needs renaming

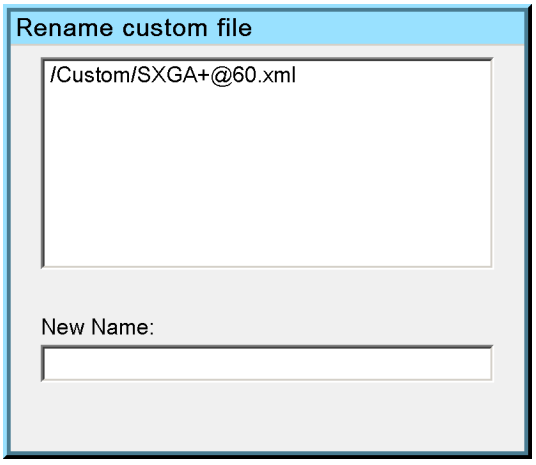


Image 10-61

4. Confirm by pressing **ENTER**

   The selected file name appears in the edit box at the bottom of the dialog box.
5. In the edit box, change the file name to your wishes
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character

6. Confirm by pressing **ENTER**
7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.5 Copy

#### Introduction

Any Custom Image file or Standard Image file can be copied to a new Custom Image file at any time.

#### How to copy an Image file?

1. In the OSD, navigate to *Image files* > *Copy...*

Image 10-62

2. Confirm by pressing **ENTER**
3. In the list of the dialog box, navigate to the Image file that needs copying

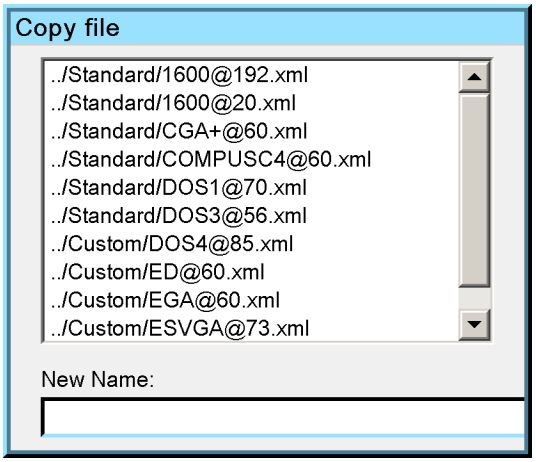


Image 10-63

4. Confirm by pressing **ENTER**

   The selected file name appears in the edit box at the bottom of the dialog box.
5. In the edit box, enter the name of the new file by changing the original file name
   - use ◄ and ► to select the character to be changed
   - use ▲ and ▼ to change the selected character
6. Confirm by pressing **ENTER**
7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.6 Delete

#### Introduction

Any Custom Image file can be deleted. It is also possible to delete all Custom Image files at once.

#### How to delete a Custom Image file (or all)?

1. In the OSD, navigate to *Image files* > *Delete...*

Image 10-64

2. Confirm by pressing **ENTER**
3. In the list of the dialog box, navigate to the Custom Image file to be deleted or to *All custom files*

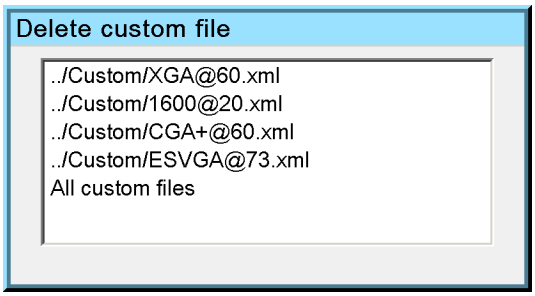


Image 10-65

4. Confirm by pressing **ENTER**
5. A confirmation request window will appear:
   - press **ENTER** to confirm
   - press **BACK** to return
6. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.8.7 Edit

### Overview

- Introduction
- Setting the Active pixels and Active lines
- Adjusting Total pixels
- Adjusting start pixels
- Adjusting Start lines
- Adjusting Phase

## 10.8.7.1 Introduction

### Introduction

**The Custom Image files for analog sources can be changed if the image is not well displayed. The Custom Image files for digital sources do not need changing. A DVI source is correctly displayed by default.**

When a source is displayed, a Custom Image file is used to collect all timing details and customized settings. In case of analog sources, it is not guaranteed that the image will be displayed fully correct. By performing a full Auto Image on a bright image, most likely the source image will be set correctly by the device itself. However, the operator can fine tune the settings manually as well. The procedures below describe in detail the advised way to align a source and to adjust the Custom image file.

### Aligning a source (editing a Custom image file): work flow

1. Set Active pixels and Active lines
2. Adjust Total pixels
3. Adjust Start pixels
4. Adjust Start lines
5. Adjust Phase

## 10.8.7.2 Setting the Active pixels and Active lines

### Introduction

The Active pixels and lines are generally known from the source signal (e.g. graphic card setting). It is the amount of pixels and lines that contain image content. For example, some commonly known resolutions (= Active pixels x Active lines) are 1280x1024,1400x1050, 1920x1080, 1920x1200.

### How to set Active pixels and Active lines?

1. In the OSD, navigate to *Image files* > *Edit...*

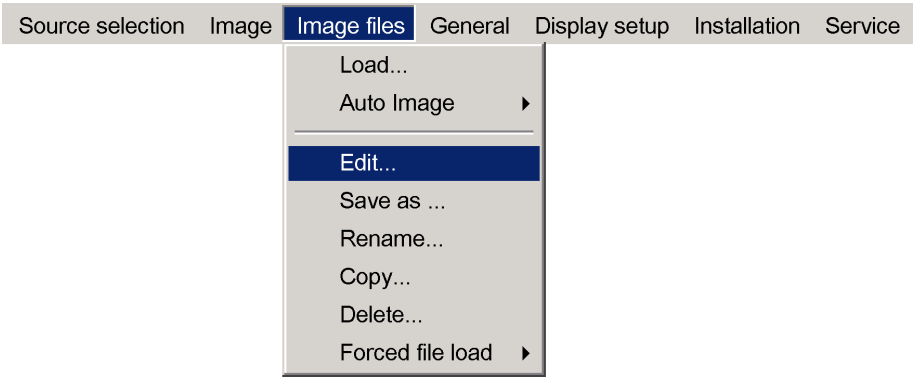


Image 10-66

2. Press **ENTER** to confirm
3. In the dialog box, navigate to the edit box of *Active pixels*

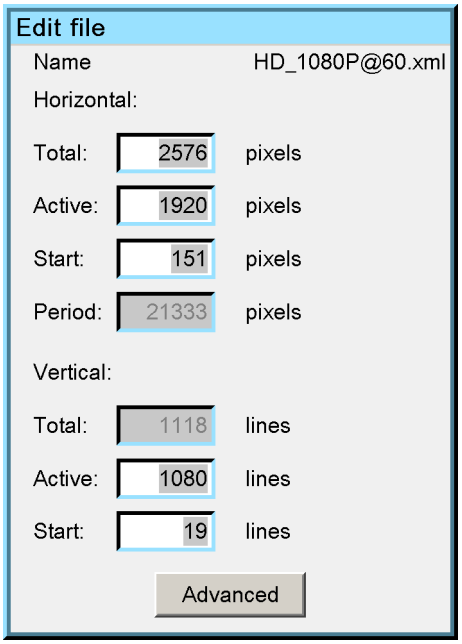


Image 10-67

4. Press **ENTER** to confirm
5. In the slider box, enter the value (e.g. 1920 in case of a HDTV source)
6. In the dialog box, navigate to the edit box of *Active lines*
7. Press **ENTER** to confirm
8. In the slider box, enter the value (e.g. 1080 in case of a HDTV source)
9. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.7.3 Adjusting Total pixels

#### How to adjust Total pixels?

1. From the source, launch a **pixel on – pixel off pattern**
2. In the OSD, navigate to *Image files* > *Edit...*

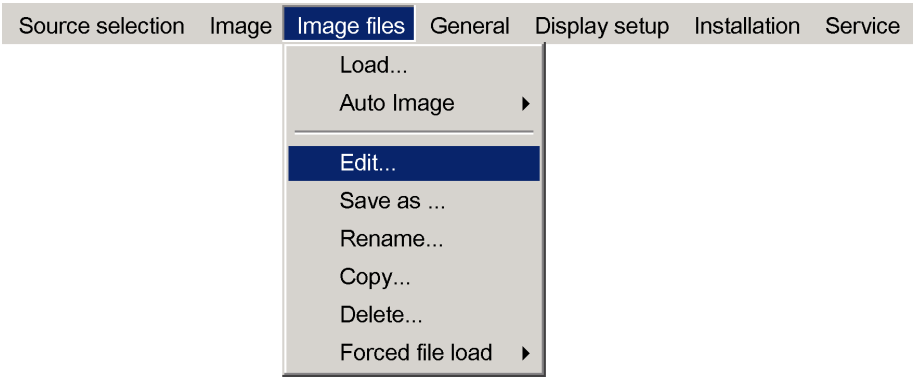


Image 10-68

3. Press **ENTER** to confirm
4. In the dialog box, navigate to the edit box of *Total pixels*

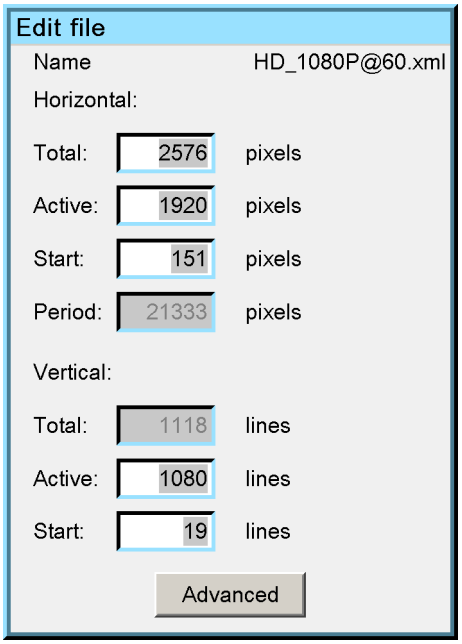


Image 10-69

5. Press **ENTER** to confirm
6. In the slider box, increase or decrease the value until no more vertical dark bars are visible

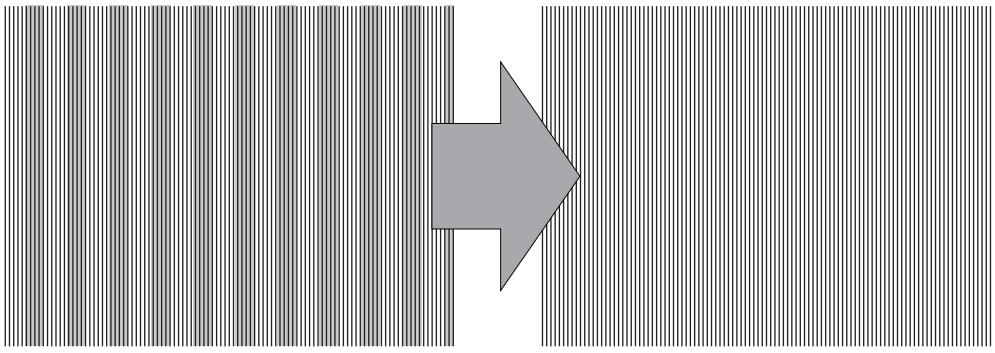

Image 10-70
Adjusting Total pixels

***Tip:*** *Increase the value and evaluate if the amount of vertical dark bars is decreasing. If yes, continue increasing the value; if no, start decreasing the value instead.*

7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

**Total lines is automatically calculated and can not be filled out by the operator.**

### 10.8.7.4 Adjusting start pixels

#### How to adjust Start pixels?

1. From the source, launch an **outline pattern**
2. In the OSD, navigate to *Image files* > *Edit...*

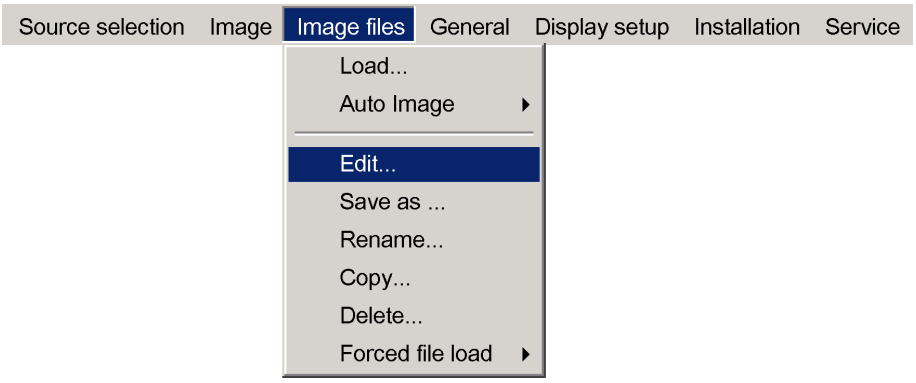


Image 10-71

3. Press **ENTER** to confirm
4. In the dialog box, navigate to the edit box of *Start pixels*

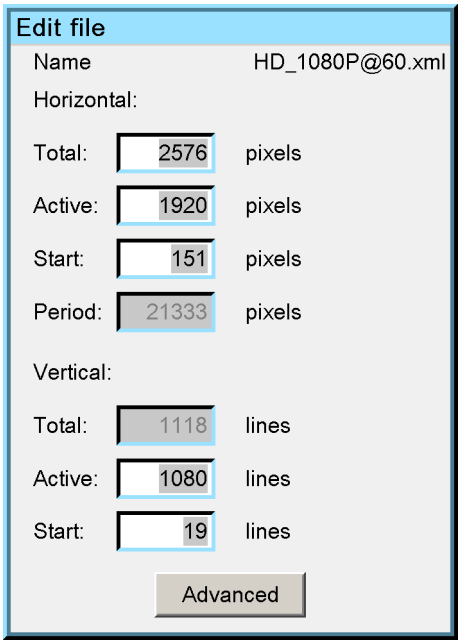


Image 10-72

5. Press **ENTER** to confirm
6. In the slider box, increase or decrease the value until both the left vertical line and the right vertical line of the outline pattern are displayed simultaneously

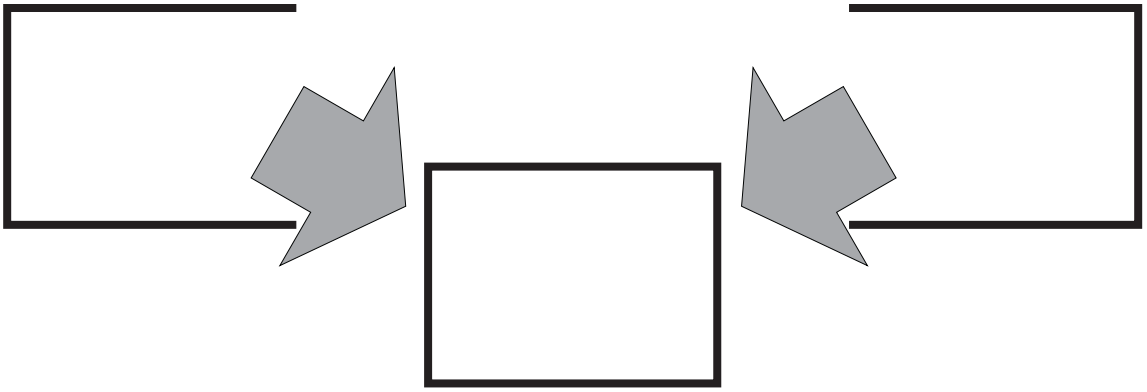

Image 10-73
Adjusting Start pixel

***Tip:*** *It the left line is visible, but the right line isn't, decrease the value. If the left line is not visible, but the right one is, increase the value.*

7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.7.5 Adjusting Start lines

#### How to adjust Start lines?

1. From the source, launch an **outline pattern**
2. In the OSD, navigate to *Image files* > *Edit...*

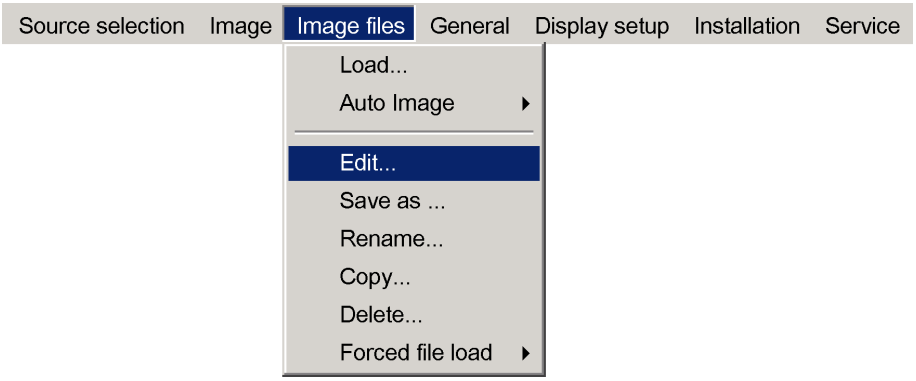


Image 10-74

3. Press **ENTER** to confirm
4. In the dialog box, navigate to the edit box of *Start lines*

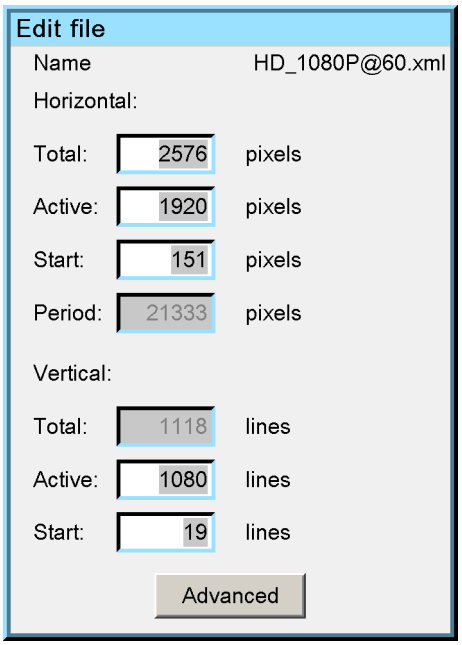


Image 10-75

5. Press **ENTER** to confirm
6. In the slider box increase or decrease the value until both the top line and the bottom line of the outline pattern are displayed simultaneously

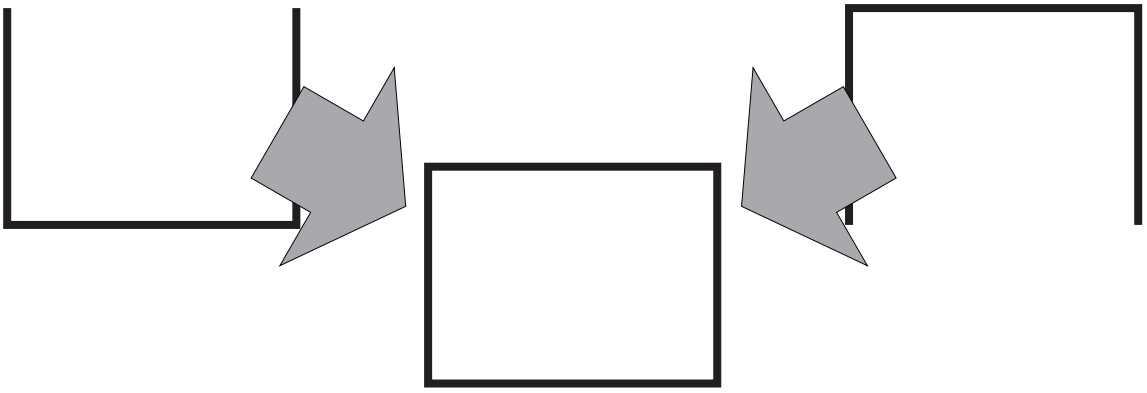

Image 10-76
Adjusting Start line

***Tip:*** *It the top line is visible, but the bottom line isn't, decrease the value. If the top line is not visible, but the bottom one is, increase the value.*

7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 10.8.7.6 Adjusting Phase

#### How to adjust Phase?

1. From the source, launch a **pixel on – pixel off pattern**
2. In the OSD, navigate to *Image* > *Settings* > *Phase...*

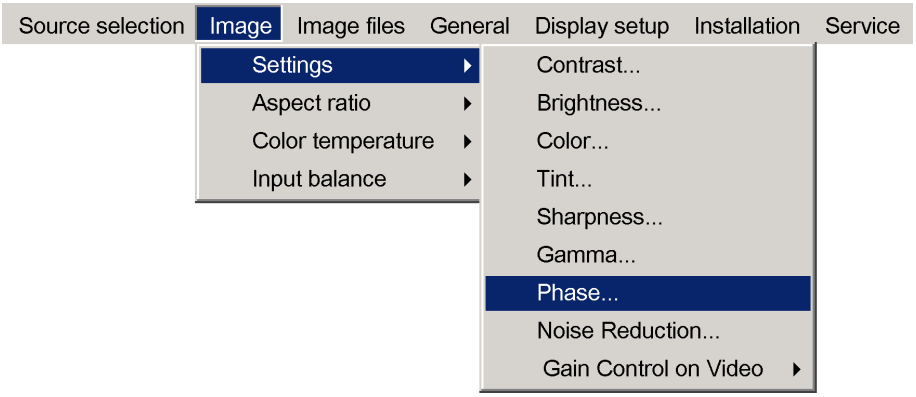


Image 10-77

3. Press **ENTER** to confirm
4. In the slider box, increase or decrease the value until the **pixel on – pixel off pattern** is stable

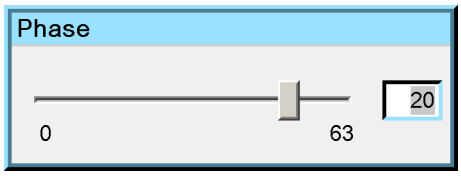


Image 10-78

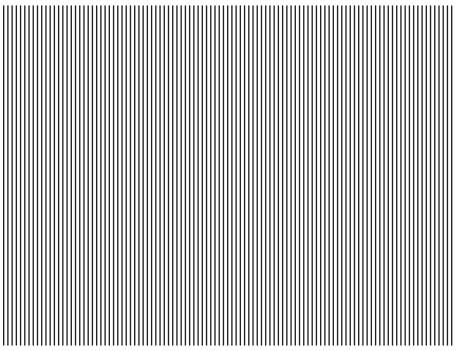

Image 10-79
Adjusting Phase

5. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 10.8.8 Forced file load

### Introduction

*Force file load* is used to force a certain Custom Image file to be loaded when the source on a specified input connector is selected to be displayed. Whatever the source signal is like, the forced file will be used to display it.

**A Custom Image file can only be forced (linked) to a specific connector if there is a source connected to it and if that source is being displayed!**

### How to link (force) a Custom Image file to a certain input connector?

1. In the OSD, navigate to *Image files* > *Forced file load...*

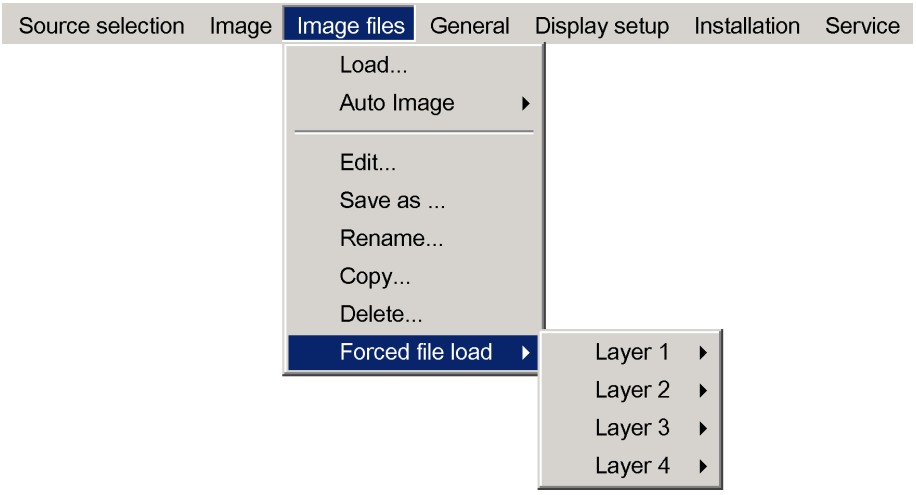


Image 10-80

2. Navigate through the submenus to select the **Layer** and the **connector**

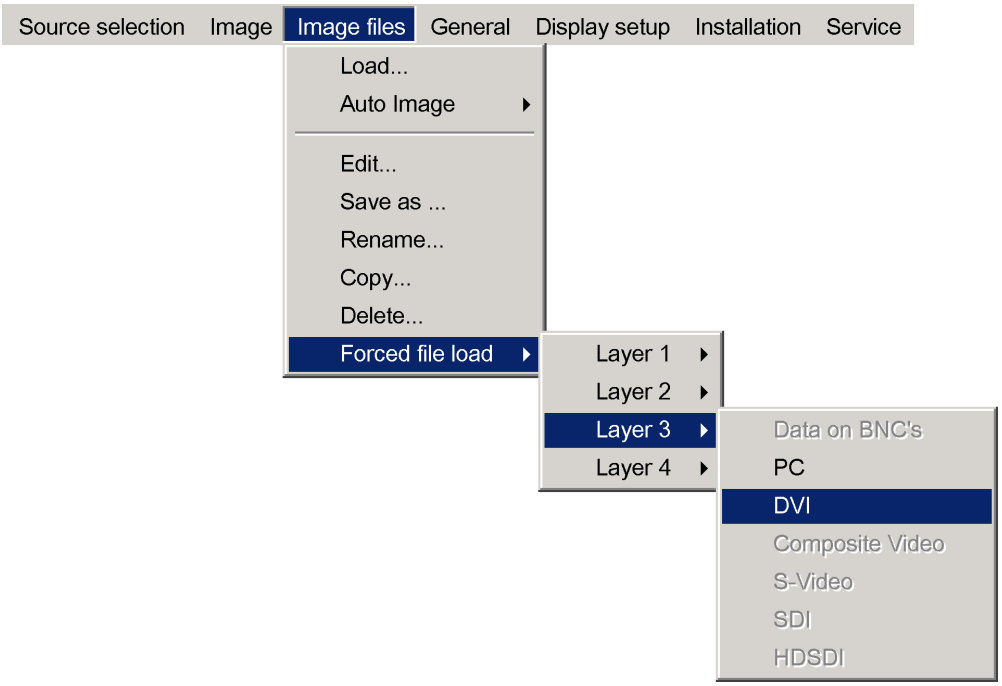


Image 10-81

3. Confirm by pressing **ENTER**

4. In the dialog box, navigate to the desired Image file

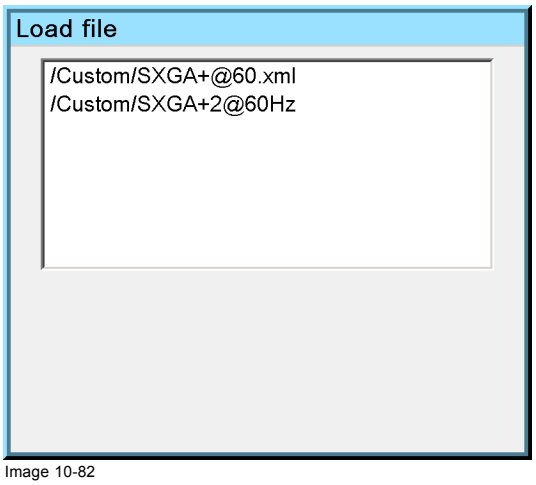


Image 10-82

5. Confirm by pressing **ENTER**

   The selected file will be displayed next to the connector name in the OSD

6. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### How to remove the Forced file?

1. In the OSD, navigate to *Image files > Forced file load...*

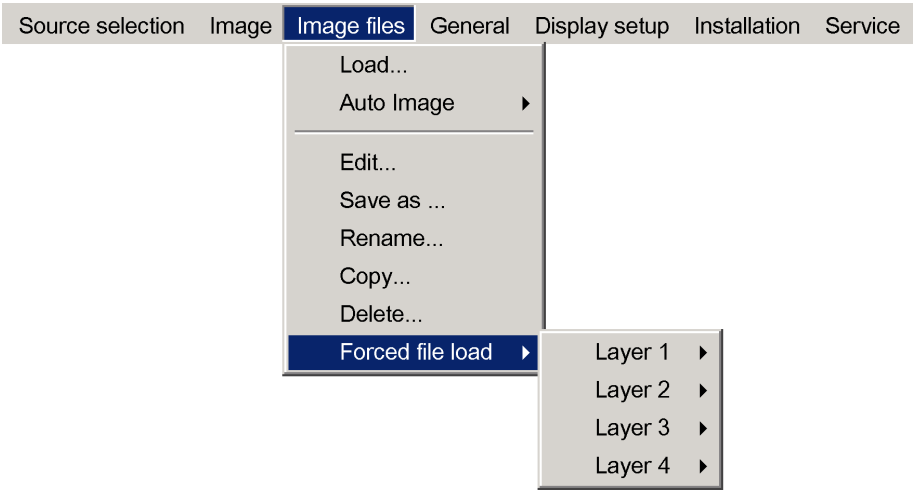


Image 10-83

2. Navigate through the submenus to select the **Layer** and the **connector** from which the Forced file must be removed
3. Remove the file by pressing **ENTER**
4. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

# 11. MAINTENANCE AND SERVICE

### About this chapter

This chapter includes the specific maintenance and service tasks:

- maintenance: the XDS-100 does not require much maintenance
- backup/restore: it is advised to backup the configuration and settings once the system is fully up and running
- firmware upgrade: upgrade of the XDS-100 firmware
- software upgrade: upgrade of the XDS CC software, running on the Desktop generating PC (this procedure is not included in this manual)
- twin dual DVI upgrade: all boards are upgraded during firmware upgrade, except for the optional twin dual link DVI input board
- diagnostics: in case of problems, some tools and features can be helpful to find the cause. This can be done through patterns or OSD menu items
- installing an additional input board: if an additional input board is ordered, it can be installed by the owner (only basic technical experience needed)
- replacing boards is done in the factory: send back the device for repair

### Overview

- Maintenance
- Data backup/restore
- Firmware upgrade
- Twin dual link DVI upgrade
- Internal and scaled patterns
- Diagnostics
- Installing an additional input layer
- Replacing boards and modules of the XDS-100

## 11.1 Maintenance

### Periodical maintenance tasks

Clean the housing of the XDS-100 with a damp cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution.

## 11.2 Data backup/restore

### Data backup/restore

In standard applications, the XDS-100 will always be controlled by the XDS CC software running on a Desktop generating PC. Backup and restore of data and configuration settings is done through the same software. See the XDS CC software user guide or reference guide.

## 11.3 Firmware upgrade

### Upgrade tool

The name of the upgrade tool is according to this format:

Image 11-1
Upgrade tool

Two main parts can be seen:

- device: this is the device type
  - XDS-100
- version: indicates the version
  - two first digit (e.g. 01): major revision
  - second pair of digits (e.g. 23): minor revision
  - last four digits (e.g. 0004): build number

### Necessary tools

- Ethernet connection to the XDS-100
- Latest version of XDS-100 firmware (= upgrade tool)

### How to upgrade the firmware of XDS-100?

1. Download the latest projector software version from My.barco.com (https://my.barco.com) or from BarcoZone (i.e. intranet: http://barcozone.barco.com)
2. Save this upgrade file on a computer which is connected to the same (local) network as the XDS-100
3. Make sure that the XDS-100 is powered
4. On the computer, double click the upgrade tool
5. Enter the IP address or host name of the XDS-100 and click **OK**

Image 11-2
Upgrading XDS-100 (1)

6. Carefully follow the instructions to proceed
7. During the upload of the upgrade files to the device, a progress bar is displayed
   ***Caution:*** *Do not switch off the XDS-100, nor the computer during the upgrade procedure!*

   ***Note:*** *In case of problems during the upgrade procedure, the following two buttons can be used for diagnostics reasons:*

   ***Save text*** *will save the text inside the Barco Networked Projector Upgrade Tool in a file*

   ***Screen shot*** *will save a screen shot of the displayed screen at that particular time.*
8. When the upgrade is successful, a green ellipse appears at the bottom of the window and an information window pops up
9. Hit **OK** to finish the upgrade
10. Reboot the XDS-100
    a) Switch the XDS-100 to standby
    b) Unplug the power supply
    c) Plug in the power supply

**If the upgrade fails, a red ellipse appears at the bottom of the window and a message pops up. Restart the procedure.**

**On startup of the XDS-100 after an upgrade of its software, the controller checks the software of the different boards and modules in the projector. If an old software version in one of these parts is detected, it is replaced by the new version. During this upgrading sequence, power may be switched automatically!**

## 11.4 Twin dual link DVI upgrade

### Introduction

The upgrade of the FPGA on the input boards is started automatically on a firmware upgrade. One exception is the upgrade of the optional twin dual link DVI board in single frustum projectors, which has to be done manually.

### How to upgrade the twin dual link DVI input board?

1. In the OSD, navigate to *Service* > *Upgrade table...*

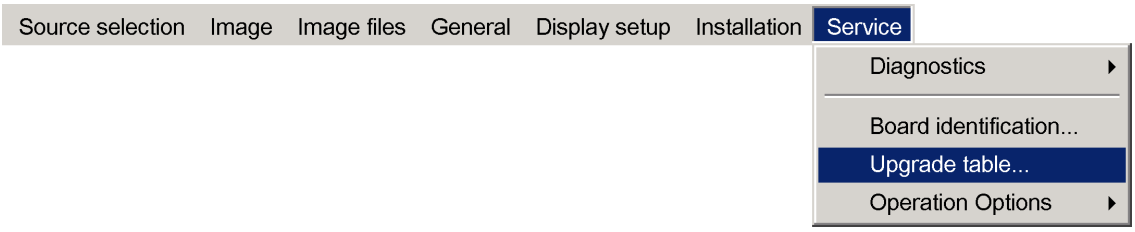


Image 11-3

2. Confirm by pressing **ENTER**
3. In the dialog box, navigate to the desired upgrade version

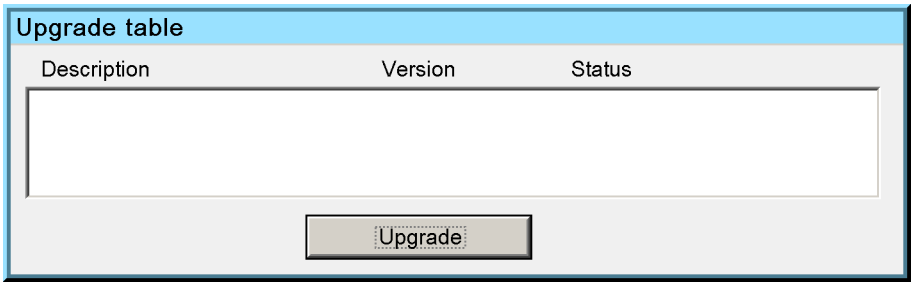


Image 11-4

4. Press **ENTER** to confirm
5. Navigate to*Upgrade*
6. Press **ENTER** to confirm and wait for the upgrade to be completed
7. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 11.5 Internal and scaled patterns

### Introduction

The XDS-100 can be used to generate a list of patterns. The **Scaled patterns** are generated right after the input boards of the XDS-100, whereas the **Internal patterns** are generated at the end of the image processing board, just before the signal is transferred to the output board.

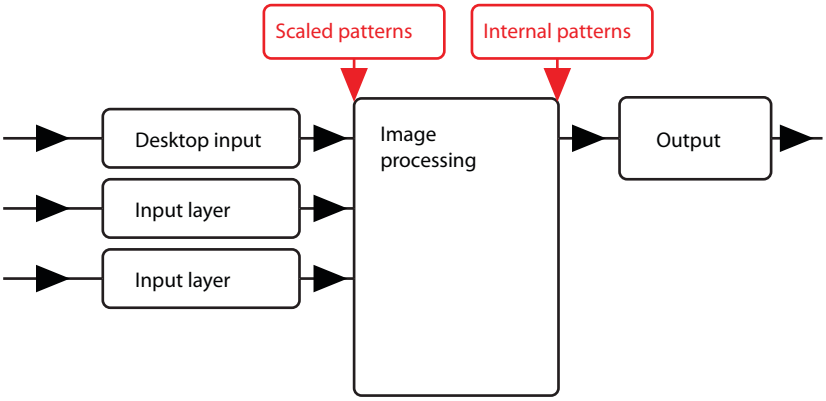


Image 11-5
XDS-100: block diagram

The patterns can be used for alignment or adjustment or they can be used for troubleshooting.

### Scaled patterns

Scaled patterns are generated just behind the input boards and have the same timings of the selected source signal, which means that they can only be displayed if a source sync signal is available. Scaled patterns appear in a source window (insertion viewer) if a source is selected from the XDS CC software.

If a source image shows some artefacts, but the scaled patterns looks fine, the cause for the artefacts must be looked for in the input board, the wires or the image generator.

If a source image shows some artefacts and the scaled pattern shows the same artefacts, the cause should be looked for in the image processing board.

## Internal patterns

Internal patterns are generated just before the output board and are seen full screen, even if XDS CC software is up and running.

If the desktop image shows artefacts, but the internal patterns look fine, then the issue will be found before the output board.

## How to display a scaled pattern?

1. In the OSD, navigate to *Installation* > *Scaled patterns*
2. Confirm by pressing **ENTER**

   A drop down list will open:

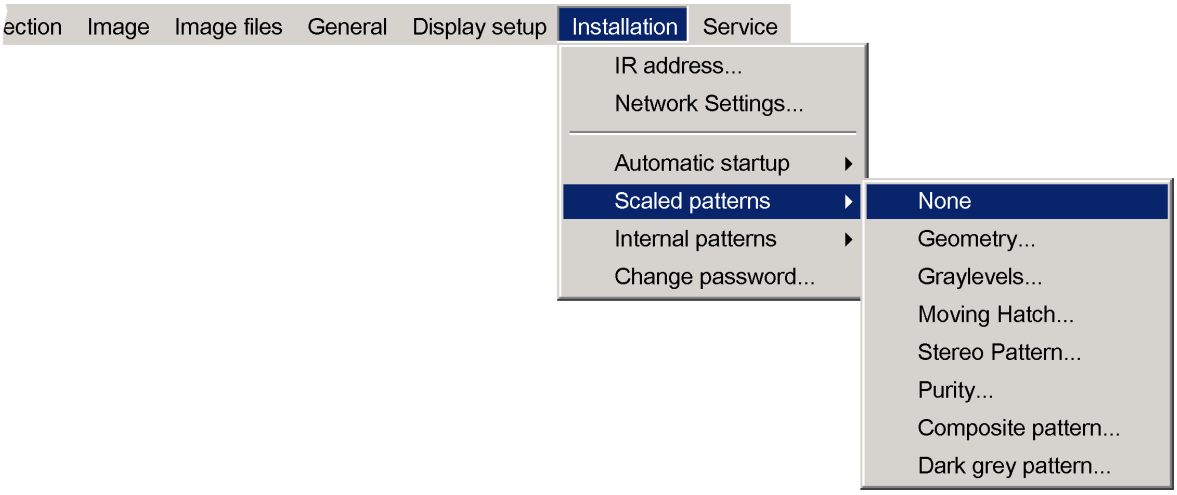


Image 11-6

3. Use the arrows ▲ and ▼ to select the desired scaled pattern
4. Confirm by pressing **ENTER**
5. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

**If you want to remove the scaled pattern, you need to select *None* in the *Scaled patterns* menu.**

## How to display an internal pattern?

1. In the OSD, navigate to *Installation* > *Internal patterns*
2. Confirm by pressing **ENTER**

   A drop down list will open:

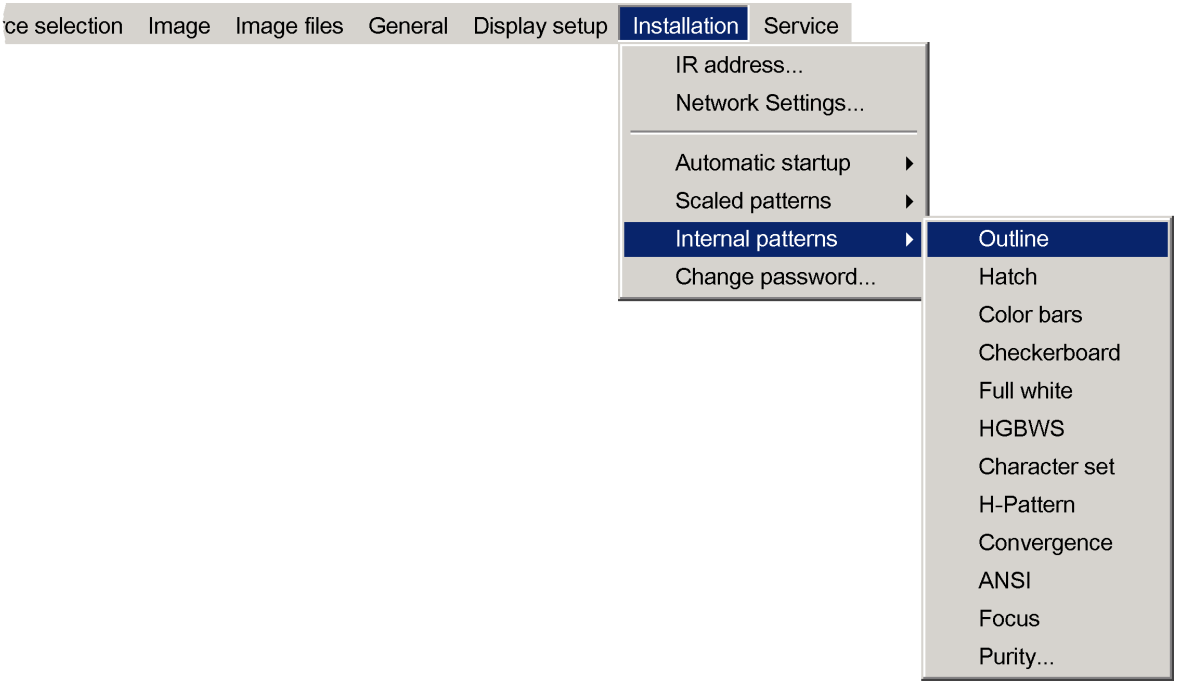


Image 11-7

3. Use the arrows ▲ and ▼ to select the desired internal pattern
4. Confirm by pressing **ENTER**
5. Press **BACK** to return one step in the menu or press **MENU** to exit the menu
   ***Note:*** *The selected internal pattern disappears on exiting the Internal patterns menu.*

## 11.6 Diagnostics

### Overview

- Diagnostics through the OSD
- LEDs
- Troubleshooting

### 11.6.1 Diagnostics through the OSD

### Overview

- Identification
- I2C
- Display mode
- Board identificaton

### Introduction

In the OSD, several menu items can be helpful to troubleshoot the XDS-100 or to collect some information that can be sent to Barco's helpdesk in case of a problem.

#### 11.6.1.1 Identification

### Introduction

The Identification window displays some useful information about the device and its firmware:

- *Type*: type of the device, e.g. XDS-100
- *Address*: unique RC5 address
- *Software*: firmware version
- *Serial no*: serial number of the device. Useful to find the default Hostname which is **X<serial number>**. (e.g. X2233445566)
- *Runtime*: runtime of the device

### How to display the Identification window?

1. In the OSD, navigate to *General* > *Identification...*

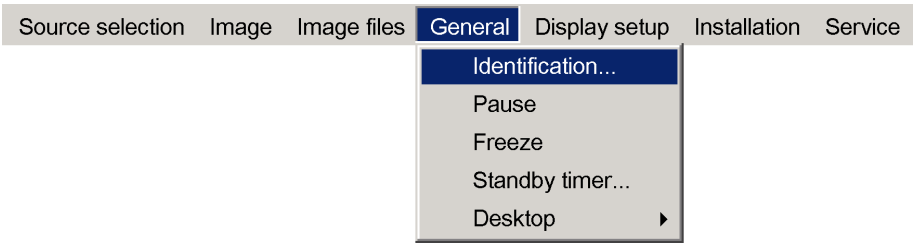


Image 11-8

2. Confirm by pressing **ENTER**

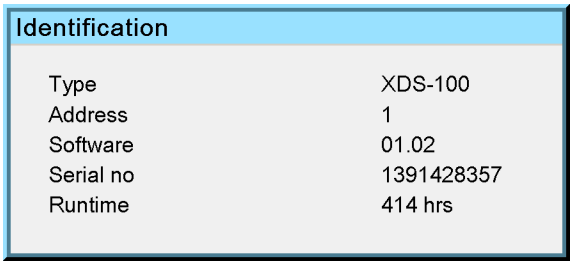


Image 11-9

3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 11.6.1.2 I2C

### Introduction

A communication bus allows diagnostics of different hardware components. A graphical interface shows the current status.

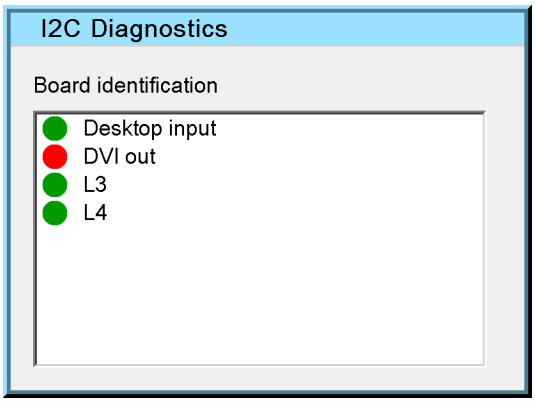


Image 11-10

If a board is not mentioned in the list of the *I2C Diagnostics* window, it is not recognized and needs to be replaced. If the board is in the list, showing a red bullet in front of it, instead of a green bullet, something is wrong and the board needs to be replaced as well.

### How to display the I2C Diagnostics window?

1. In the OSD, navigate to *Service*> *Diagnostics* > *I2C...*

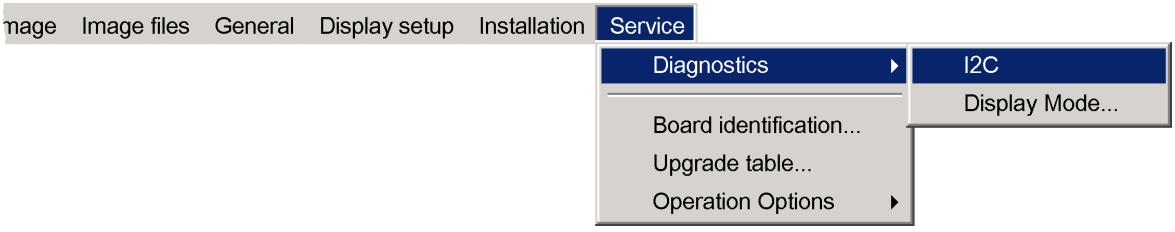


Image 11-11

2. Confirm by pressing **ENTER**

   A dialog box pops up, showing some information

3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 11.6.1.3 Display mode

#### Introduction

The Display mode window allows to monitor the signal characteristics of the output board:

- Output frequency: indicates the vertical refresh rate of the signal at the output board (always 60Hz)
- Lock mode: indicates to which clock the output signal is locked (always: an internally generated clock)
- Diagnostic code (e.g. 0280): can help Barco engineers to know the exact system status

#### How to display the Display mode window?

1. In the OSD, navigate to *Service> Diagnostics > Display mode...*

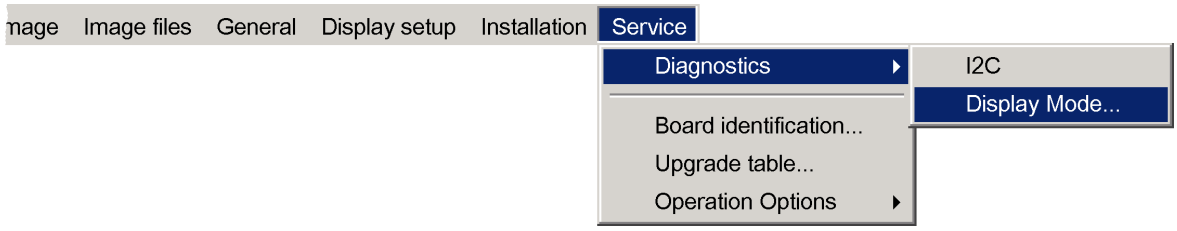


Image 11-12

2. Confirm by pressing **ENTER**

   The dialog box pops up

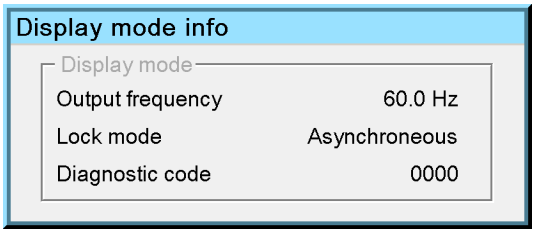


Image 11-13

3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

### 11.6.1.4 Board identificaton

#### Introduction

The Board identification window lists the boards of the XDS-100, together with their article number. Some examples of existing boards:

- Pmp: image processing board (Pixel Map Processor)
- SBC LVDS receiver: board that translates LVDS signals in digital data
- Desktop input: desktop input board
- DVIout: Output board
- QxgaRgbUxgaDVI: DVI / D15 input board

#### How to display the Board identification window?

1. In the OSD, navigate to *Service> Board identification...*

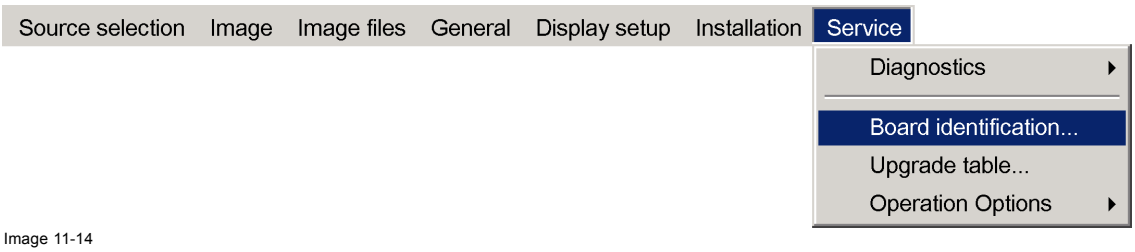


Image 11-14

2. Confirm by pressing **ENTER**

The dialog box pops up

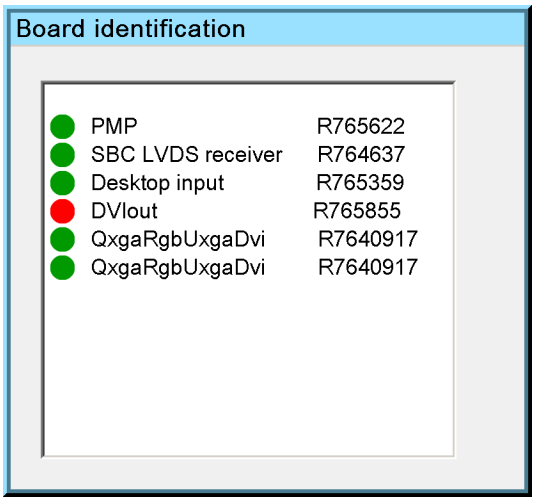


Image 11-15

3. Press **BACK** to return one step in the menu or press **MENU** to exit the menu

## 11.6.2 LEDs

### Introduction

At the front side of the XDS-100, four LEDs indicate the status of the XDS-100.

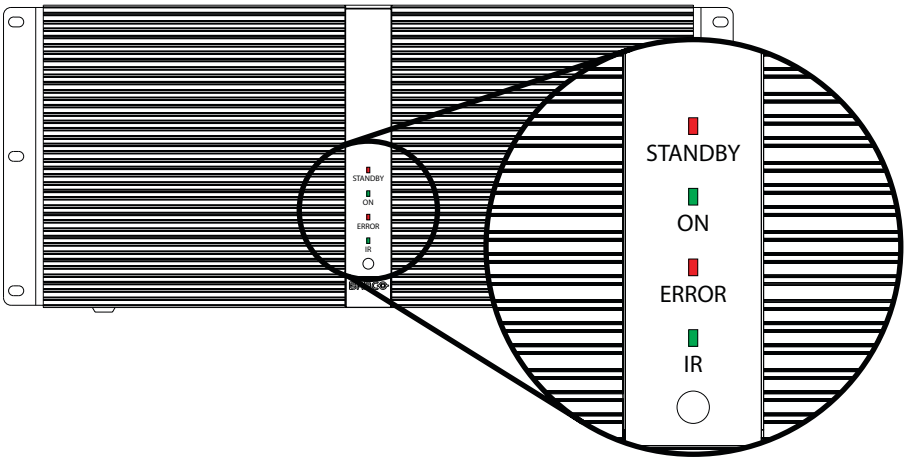


Image 11-16
LEDs

| LED / Status | Not powered | Standby | Configuring (standby → active) | Active | IR activity | Hardware error |
|---|---|---|---|---|---|---|
| STANDBY LED (red) | OFF | ON | ON | OFF | NA | NA |
| ON LED (green) | OFF | OFF | ON | ON | NA | NA |
| ERROR LED (red) | OFF | OFF | OFF | OFF | NA | ON |
| IR LED (green) | OFF | ON (in case of network connection)<br>OFF (no network connection | ON | ON (in case of network connection)<br>OFF (no network connection | BLINKING | NA |

## 11.6.3 Troubleshooting

### Introduction

This section summarizes some cases where a problem occurred due to wrong settings.

### No image

- Use the **standby** key to switch XDS-100 to active state
- In the OSD, browse to *General* > *Desktop* and switch it to **ON**
- Select the same resolution in the graphic card of the Desktop generating PC as on the XDS-100 (switch)

### Black boarders around a source image inside its viewer

- In Windows 7, right click on the desktop, select *Screen Resolution*, select *Make text and other items larger or smaller*, select radio button *Smaller - 100%*

### Video insertion viewers show a black image

- Graphics card color setting is not set to Highest quality (or to 32 bits)
- Desktop color settings of the graphics card are not the default ones
- Graphics card of the Desktop generating PC is different from Single (one display) or Clone (Same image on both displays)

### Testing an input board

If a source is not displayed, you can easily find out if the input board is the cause or not.

1. On the Desktop Generating PC, stop the XDS CC software
2. In the OSD of XDS-100, browse to *General* > *Desktop* and select *Off*
3. In the OSD of XDS-100, browse to *Source Selection* and select the concerning input source
4. If the source is displayed (full screen), the input board is fully functional.
5. Restore the previous settings
   - *General* > *Desktop* > *On*
   - Start XDS CC software

## 11.7 Installing an additional input layer

**CAUTION: If an input board is added or removed or if an existing input board is replaced by a different type, the input depending data must be cleared by clicking the button 'Reset Input Configuration' in the *Configure Display Settings* page of the XDS CC software configuration. See concerning chapter.**

**CAUTION: If an additional input board is installed in layer one (being the top layer), the EMC finger clip must be removed from the blank cover plate and must be installed at the bottom edge of the input board's cover plate to keep the device EMC compliant.**

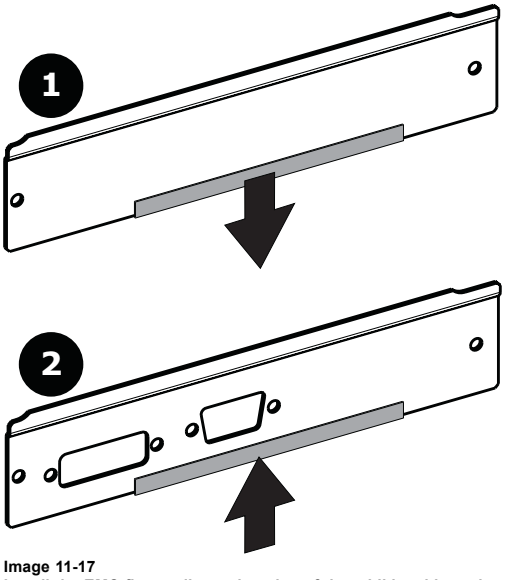


**Image 11-17**
**Install the EMC finger clip on the edge of the additional input board**

## How to install an additional input layer?

In the procedure below, a DVI / D15 input layer is installed. Other types of input layers can be installed in a similar way.

1. Unscrew and remove the blank front plate

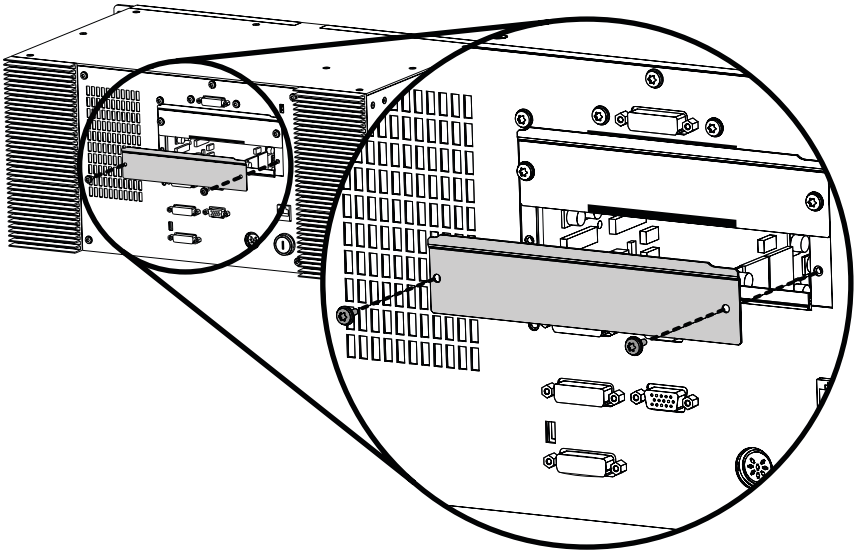

Image 11-18
Blank front plate: removing

2. Slide the input board into the empty slot

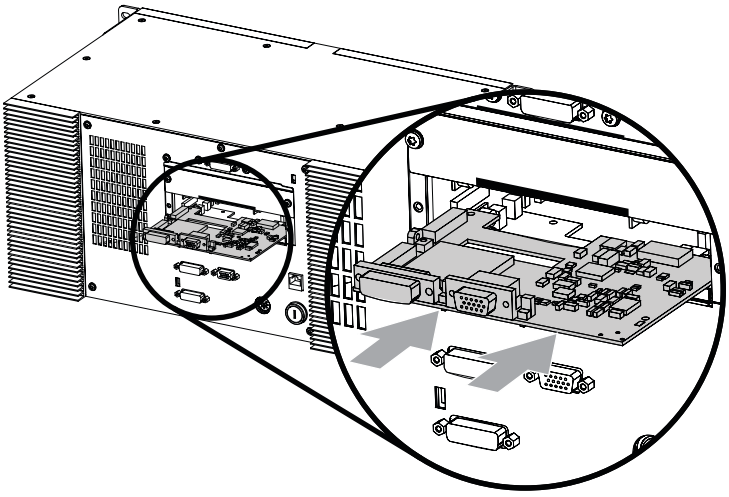

Image 11-19
Input board: inserting

3. Push the input board to the left to plug in the board-to-board connectors

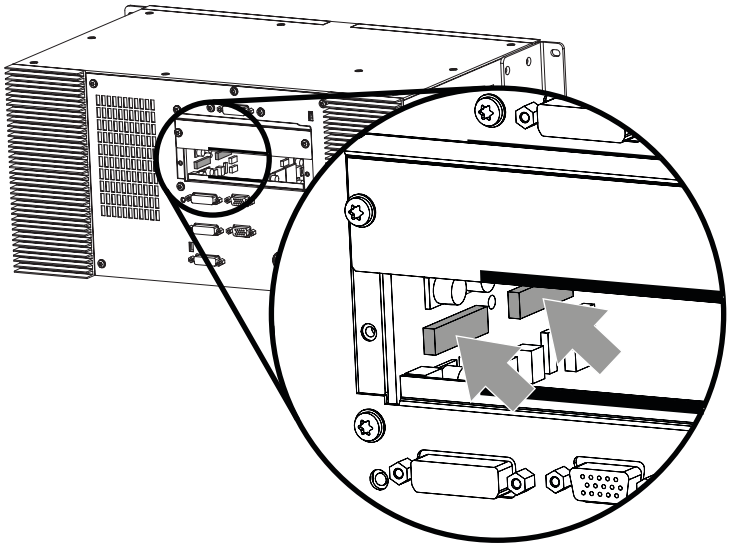

Image 11-20
Board-to-board connectors

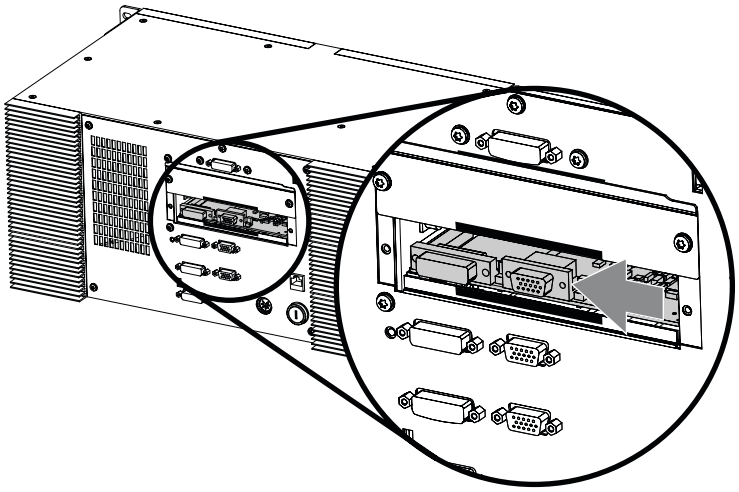

Image 11-21
Input board: connecting

4. Place the front plate in the right position and fix it to the frame using two screws

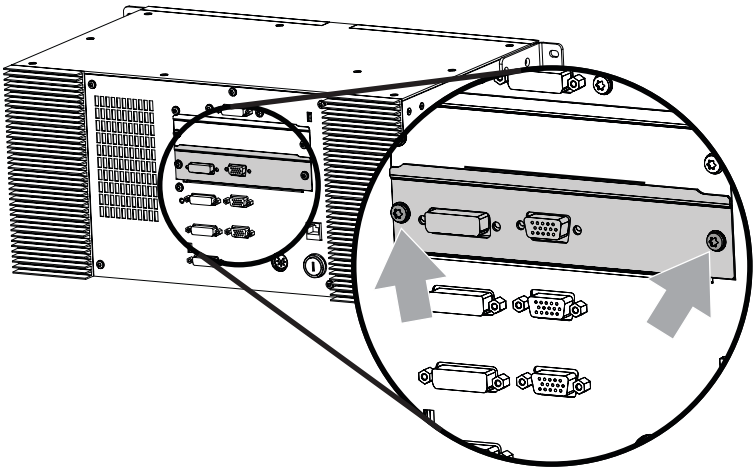

Image 11-22
Front plate: fixing screws

5. Fix the input board to the front plate using the front bolts

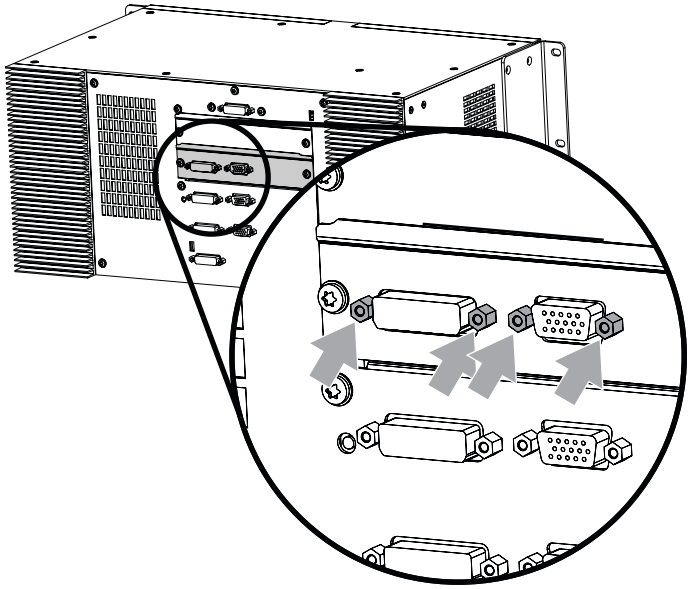

Image 11-23
Input board: fixing bolts

***Note:*** *This can be slightly different, depending on the type of input board.*

## 11.8 Replacing boards and modules of the XDS-100

**CAUTION: If an input board is added or removed or if an existing input board is replaced by a different type, the input depending data must be cleared by clicking the button 'Reset Input Configuration' in the *Configure Display Settings* page of the XDS CC software configuration. See concerning chapter.**

### Replacing boards and modules of the XDS-100

Board replacement and module (e.g. fans) replacement is done in the factory. The device must be sent back to Barco nv. Please contact Helpdesk.

# A. RCU CONTROL

## About this chapter

**The RCU (Remote Control Unit) can be used for several purposes, however after installation it will not often be used, since the XDS-100 display system will be fully controlled through the XDS CC software running on the Desktop generating PC.**

To enable communication between RCU and XDS-100, both must be set to the same IR address.

We can classify the RCU buttons in functional groups:

- buttons for projector OSD navigation and selection
- buttons used for data input
- buttons to control the XDS-100
- buttons to adjust image settings

**To guarantee good communication, point the RCU towards the Infrared Receiver of the XDS-100 which is located at the front side of the box, just above the Barco sign.**

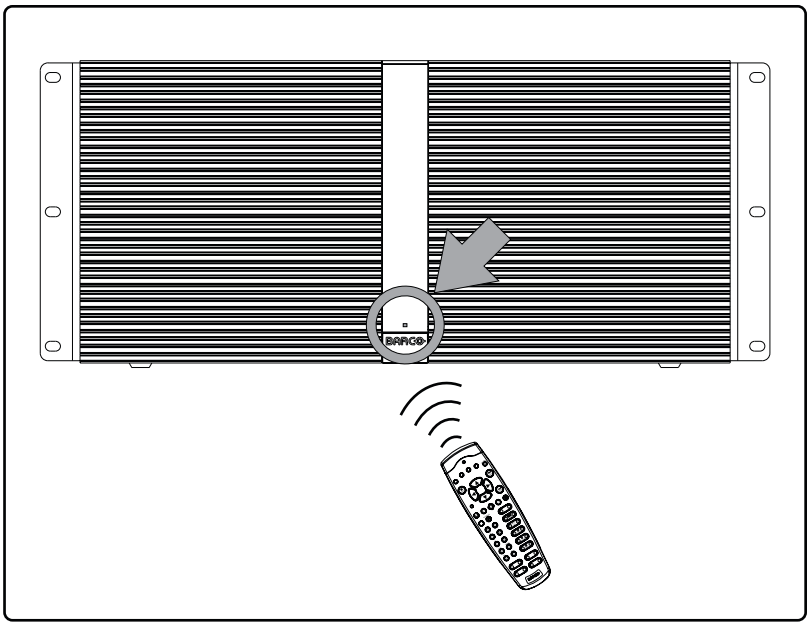


**Image A-1**
**IR receiver**

## Overview

- OSD navigation and selection
- Data input
- XDS-100 control
- Image settings

## A.1 OSD navigation and selection

### Buttons on the RCU used to use the OSD

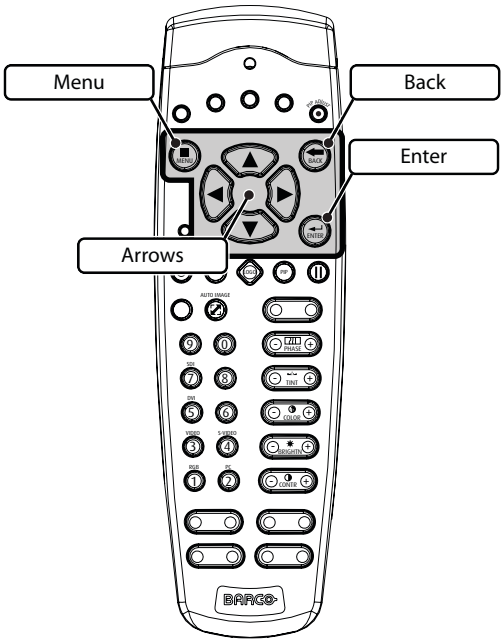


Image A-2
RCU: OSD navigation and selection buttons

- **MENU**: to display the OSD (On Screen Display)
- **BACK**: to return one step
- **ENTER**: to confirm or select
- Navigation buttons: ▲ (up), ▼ (down), ◄ (left), ► (right). Used to navigate through the OSD.

### Example: How to navigate to the IP address edit box in the Network settings dialog box?

1. On the RCU, press **MENU** to display the OSD
2. Press the arrow key ► a multiple times until *Installation* is highlighted (dark background)
3. Press the arrow key ▼ to open the drop down menu
4. Press the arrow key ▼ a multiple times until *Network address...* is highlighted (dark background)
5. Press **ENTER** to open the dialog box

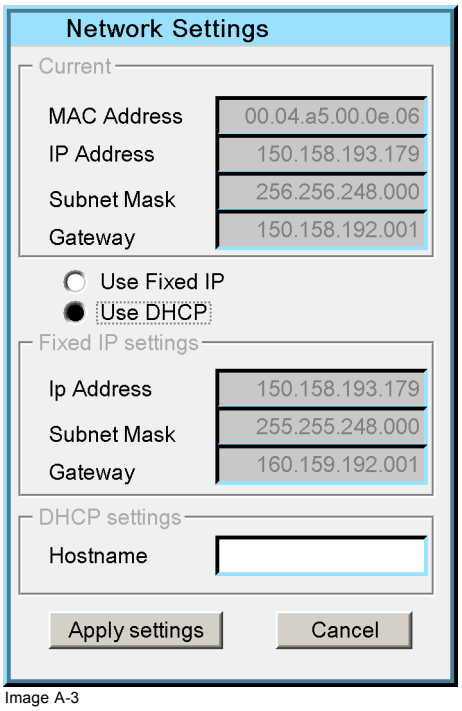


Image A-3

6. Press the arrow key ▼ a multiple times until *IP address* is highlighted (an outline is visible around the word IP address)
7. Press **ENTER** to activate the edit box

## A.2 Data input

### Buttons on the RCU used for input of data

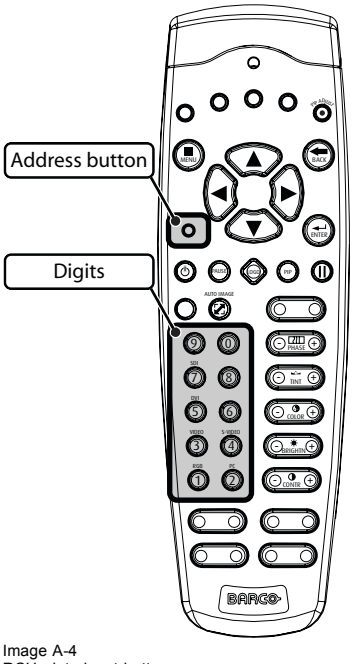


Image A-4
RCU: data input buttons

- **Set address** button: a sunk-down button to enable address programming
- **0** .. **9**: buttons to enter a numerical value

### Example: how to enter a new Standby timer value?

Assume that we want to change the timer value from 300 to 180 seconds.

1. In the OSD, navigate to *General > Standby timer...*

2. Press **ENTER** to select.

   A dialog box is displayed.

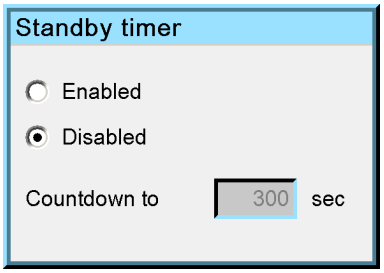


Image A-5

3. Navigate to the edit box and press **ENTER** to activate it
4. Use the arrow ► to highlight the digit “3”
5. Press the arrow ▼ twice to change the digit from “3” down to “1”
6. Use the arrow ► to highlight the digit “0”
7. Press the arrow ▼ twice to change the digit from “0” down to “8”
   ***Note:*** *Alternatively, the arrow ▲ can be pressed 7 times to go up from “0” to “8”.*

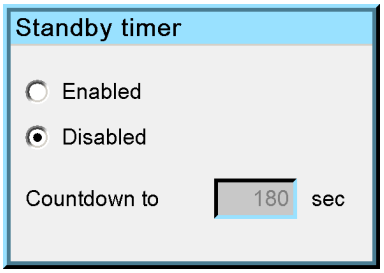


Image A-6

8. Press **ENTER** to confirm
9. Press **BACK** to go one step back in the menu or press **MENU** to exit the menu

## A.3 XDS-100 control

### Buttons on the RCU used to control the XDS-100

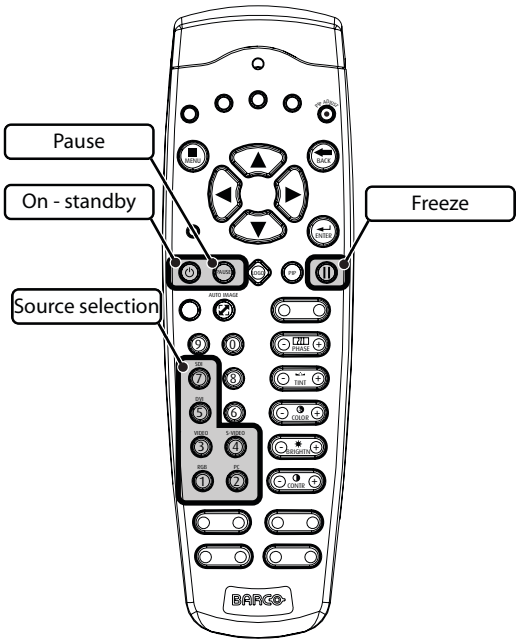


Image A-7
RCU:control buttons

- **On / Standby** button ⏻ : to switch XDS-100 to **active state** or to switch it to **standby**
- **Pause**: to switch XDS-100 to pause or back to normal state. If Pause is active, the display will show full black, although XDS-100 remains in active state (not standby!).
- **Freeze** ⏸ : to freeze/unfreeze the image
- Source selection buttons:
  - **1** (RGB)
  - **2** (PC)
  - **3** (VIDEO)
  - **4** (S-VIDEO)
  - **5** (DVI)
  - **7** (SDI)

  These buttons can be used as shortcut keys to display a source full screen (if no XDS CC software is running) or in a window in native resolution (if XDS CC software is running). Pressing a multiple times cycles through the sources connected to the same type of connector:
  **Example:** two DVI sources are connected to the XDS-100: on to the DVI-D connector on input layer 3, the other to the DVI-D connector on input layer 4. Pressing **5** on the RCU will launch the DVI source which is connected to the DVI-D connector of input layer 3. Pressing **5** again, will launch the DVI source which is connected to the DVI-D connector of input layer 4. Pressing **5** again will launch the DVI source of input layer 3.

## A.4 Image settings

### Buttons on the RCU used to change the image settings

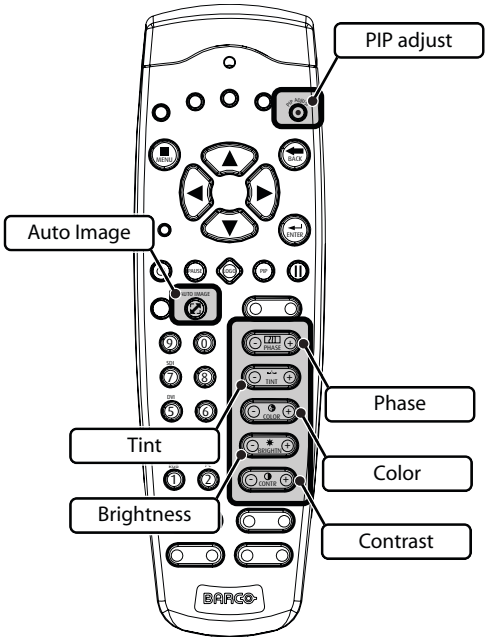


Image A-8
RCU: buttons to change image settings

- **PIP adjust**: to select a PIP. Cycles through the displayed PIPs
- **Auto Image**: to start the APA (Automatic Pixel Alignment) of the selected PIP
- **Phase**: to set the phase of the sample signal of the selected PIP in case of an analog source signal. Easy to use on **pixel on-pixel off** pattern
- **Tint**: to adjust the color of the selected PIP in case of NTSC video
- **Color**: to adjust the color of the selected PIP
- **Brightness**: to adjust the brightness of the selected PIP
- **Contrast**: to adjust the contrast of the selected PIP

# B. OSD (ON SCREEN DISPLAY)

### Overview

- Introduction
- Operating the OSD

## B.1 Introduction

### Description

**Although the OSD can be used to control image settings, pixel alignment and image files, the system user will normally use XDS CC software to perform these tasks!**

The OSD is a **menu bar**, generated by the XDS-100, that can be shown on the display. Navigation through the OSD and control of it is done via the RCU.

When opening a drop down menu, only the basic menu items are shown. The menu item *More...* ,available below the menu separator at the bottom of some drop down menus, indicates the availability of some additional, more **advanced** menu items. A **password** is needed to display the advanced menu items.

### Image

The OSD looks like this:

Image B-1

Each of the menu items can be clicked on to show a drop down menu box. The menu items of the drop down menu can be clicked on as well to open one more drop down menu or to open a dialog box where data can be entered.

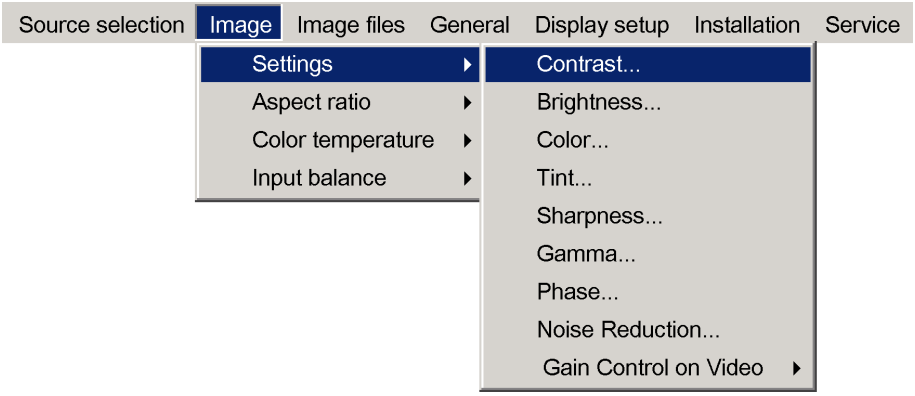


Image B-2

## B.2 Operating the OSD

### Overview

- Displaying the advanced menu items
- Navigating through the OSD
- Opening a drop down menu
- Opening a dialog box
- Activating a menu item of a drop down menu
- Enabling/disabling check boxes
- Moving a slider in a slider box
- Entering data in an edit box

### B.2.1 Displaying the advanced menu items

**The advanced menu items are protected by a password. By default the password is 0000 but the operator can change it to any value between 0000 and 9999.**

#### How to display the advanced menu items?

1. Press **ENTER** to display the menu bar
2. Use the arrow key ► to select any of the menu items: a highlighted item indicates the selected item
3. Press the arrow key ▼ to open the drop down menu
4. Press the arrow key ▼ a multiple times to select *More...*
5. Press **ENTER** to open the dialog box
6. Enter the password:
   - press ◄ or ► to select the character to be changed
   - press ▲ or ▼ to change the value of the selected character, or enter a digit by pressing the according key on the RCU
7. Confirm the password by pressing **ENTER**

   The advanced menu items are now displayed at the bottom of the drop down menu, below the menu separator.

### B.2.2 Navigating through the OSD

#### How to navigate through the OSD?

1. Make sure the RCU address has been set to the same unique IR address of the XDS-100 or to its common RC5 address.
2. On the RCU, use the arrows ▲, ▼, ◄ and ► to navigate through the menu items: a highlighted menu item indicates the actual position
   ***Note:*** *The same rules apply when navigating within a dialog box!*

**Scrolling through the menu bar or through the drop down menus or through a list is a cycle, which means that after the last item has been selected, the next selected item will be the first item again.**

**Also see "RCU Control", page 111.**

### B.2.3 Opening a drop down menu

#### How to open a drop down menu form the main menu bar?

1. Navigate to the desired menu item
2. On the RCU, press ▼ to open the drop down menu

#### How to open a drop down menu from a drop down menu item?

1. Navigate to the desired menu item, having an arrow (►) next to it
2. On the RCU, press ► to open the drop down menu

### B.2.4 Opening a dialog box

#### How to open a dialog box?

1. Navigate to the desired menu item, having three dots next to it (e.g. *Contrast...*)
2. On the RCU, press **ENTER** to open the dialog box

### B.2.5 Activating a menu item of a drop down menu

#### How to activate a menu item of a drop down menu (e.g. On / Off)?

1. Navigate to the menu item of your choice: a highlighted menu item indicates the selection

2. Confirm by pressing **ENTER**

   The activated item is indicated by a bullet in front of it.

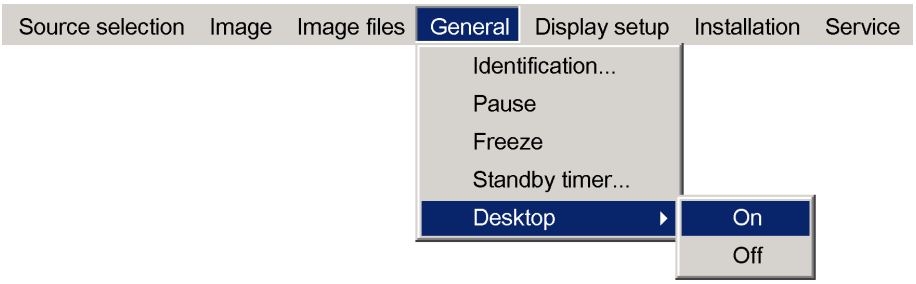


Image B-3

### B.2.6 Enabling/disabling check boxes

#### How to enable or disable a check box in a dialog box?

1. Navigate to the check box: a border around the text joining the check box indicates a selected item
2. Press **ENTER** to check or uncheck (depending on the actual status)

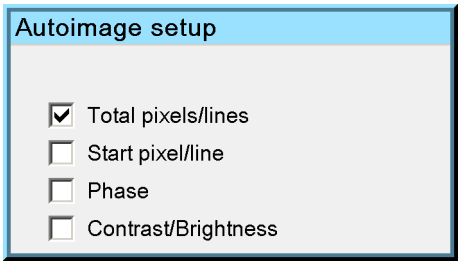


Image B-4

### B.2.7 Moving a slider in a slider box

#### How to move a slider in a slider box?

1. From a menu item, open the slider box by pressing **ENTER**

   The slider box appears. E.g.

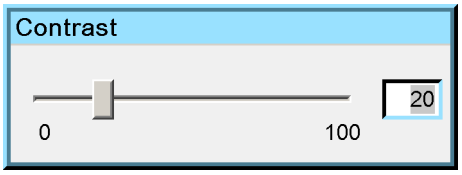


Image B-5

2. Use ◄ or ► to move the position of the slider

### B.2.8 Entering data in an edit box

#### How to enter data in an edit box?

1. Navigate to the desired edit box: an edit box having a blue background color is selected

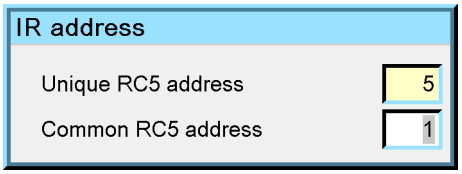


Image B-6

2. Press **ENTER** to activate it
3. Enter the value (digits or characters):
   - use ◄ and ► to select the character to be changed: a highlighted character (blue background color) can be changed
   - use ▲ and ▼ to change the value of the highlighted character, or press the desired digit button on the RCU

4. Press **ENTER** to confirm

# C. RACK MOUNT BRACKETS

### Introduction

The rack mount brackets, which are delivered with the XDS-100, can be mounted to the XDS-100 to install the device in a rack.

The device is 19” rack mount, 4.6U.

## C.1 Installing the rack mount brackets

### How to install the rack mount brackets?

1. Remove the screws as indicated on the pictures below

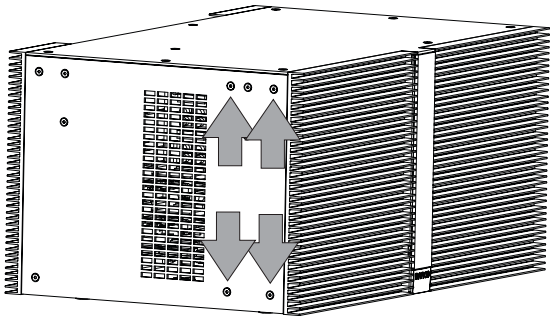

Image C-1
Rack mount: left bracket fixing points

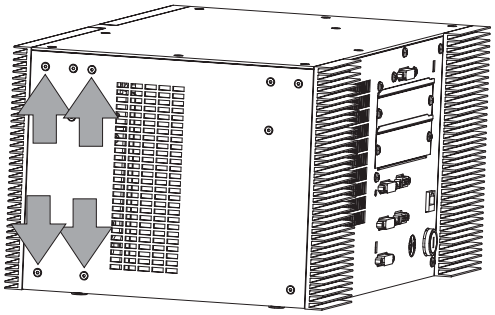

Image C-2
Rack mount: right bracket fixing points

2. Fix the rack mount brackets to the XDS-100 using 2 x 4 screws

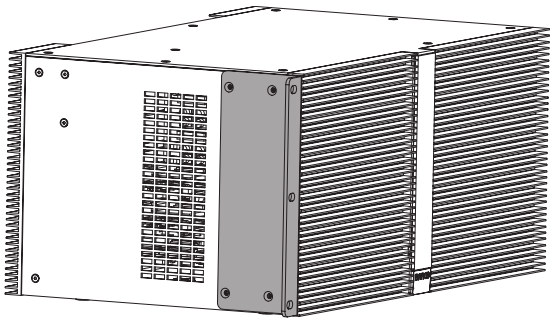

Image C-3
Rack mount: left bracket fixed

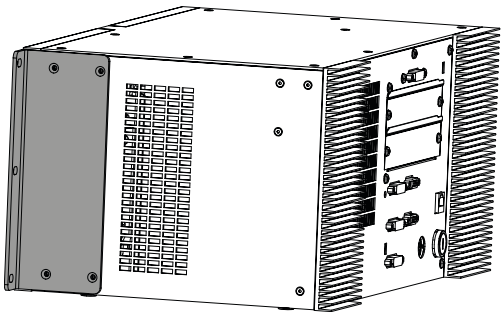

Image C-4
Rack mount: right bracket fixed

# D. SOFT ADHESIVE FEET

### Introduction

If the XDS-100 will be installed on a table, four soft adhesive pads are delivered with the unit to stick on the device's feet. This will prevent the XDS-100 box from scratching the supporting surface (e.g. table surface).

## D.1 Installing the soft adhesive feet

### How and where to stick the soft adhesive feet to the device?

1. Remove the protective film from the adhesive side of the pads
2. Stick the soft adhesive feet to the bottom of the XDS-100 device as indicated in the picture below

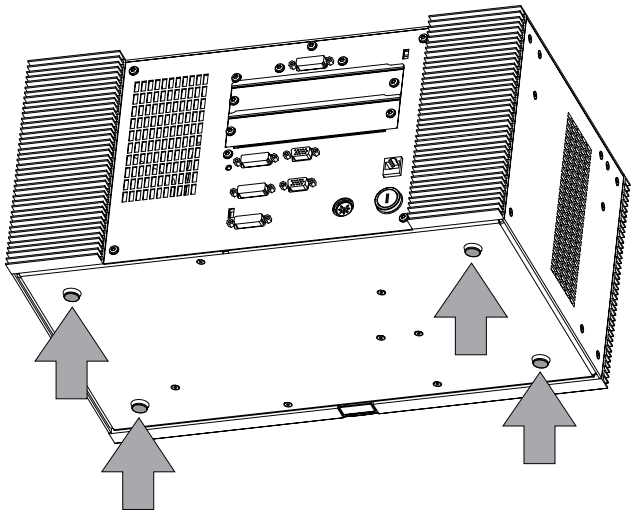

Image D-1
XDS-100: soft adhesive feet

# E. VIDEO CONFERENCE SYSTEM

### About this chapter

A Video Conference system can be connected to and controlled by the XDS CC software. To get the Video Conference system up and running, the procedures in the concerning manual must be followed. To connect it and control it by XDS CC software it must be configured as described in the XDS CC user manual and reference guide.

We have encountered however that some settings are critical to ensure good operation with XDS CC software. These settings depend on the type of the Video Conference system. This chapter contains the information about these critical settings per type of Video Conference system.

## E.1 Tandberg MXP6000

### E.1.1 Checking communication with the Video Conference system

#### How to check communication using the PING command?

1. On the Desktop generating PC go to *Start* > *Run* and type `cmd`
2. Enter the following command: `ping <IP-address/hostname>`, where the IP address or the hostname of the Video Conference system is used

   Example: `ping 150.158.197.22`
3. Hit **ENTER**

   A reply should be received. If not, check the network connections and configuration.

#### How to check communication using a telnet session?

1. On the Desktop generating PC go to *Start* > *Run* and type `cmd`
2. Enter the following command: `telnet <IP-address/hostname>`, where the IP address or the hostname of the Video Conference system is used

   Example: `telnet 150.158.197.22`
3. Hit **ENTER**

   You should get a prompt asking you to log in.
4. Enter *Login* and *Password* to ensure that you have the correct credentials

#### How to check communication using Internet Explorer?

1. On the Desktop generating PC, open Internet Explorer
2. In the address bar, type `http://<IP-address/hostname>`, where the IP address or the hostname of the Video Conference system is used

   Example: `http://150.158.197.22`
3. Click *Go*

   A web page, showing the web interface of the Video Conference system should open

### E.1.2 Enabling the required services

#### How to enable the required services?

1. On the Desktop generating PC, open Internet Explorer
2. In the address bar, type `http://<IP-address/hostname>`, where the IP address or the hostname of the Video Conference system is used

   Example: `http://150.158.197.22`
3. Click *Go*

   A web page, showing the web interface of the Video Conference system opens
4. Click the *System Configuration* tab

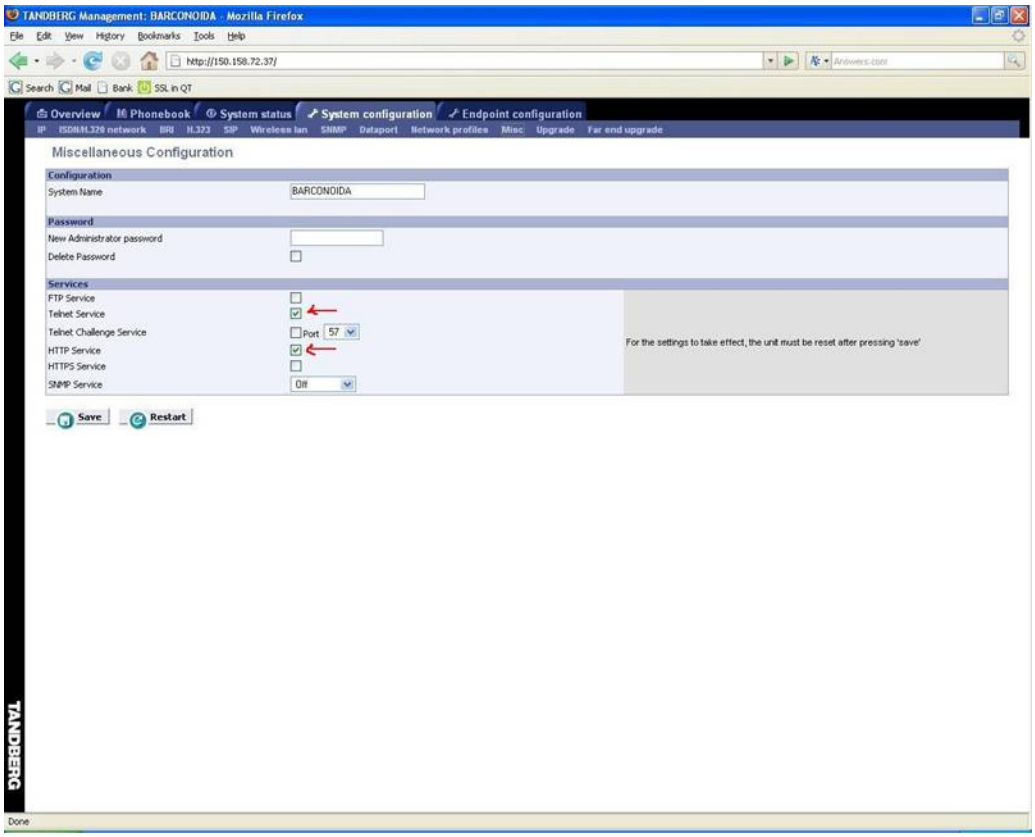


Image E-1
Tandberg MXP6000: enable services

5. Click the *Miscellaneous configuration* menu
6. Enable **Telnet** and **HTTP** services I they are not already enabled
7. Click *Save*
8. Click *Restart*

### E.1.3 Setting a password

#### How to set a password via the web interface?

1. On the Desktop generating PC, open Internet Explorer
2. In the address bar, type `http://<IP-address/hostname>`, where the IP address or the hostname of the Video Conference system is used

   Example: `http://150.158.197.22`
3. Click *Go*

   A web page, showing the web interface of the Video Conference system opens
4. Click the *Endpoint configuration* tab

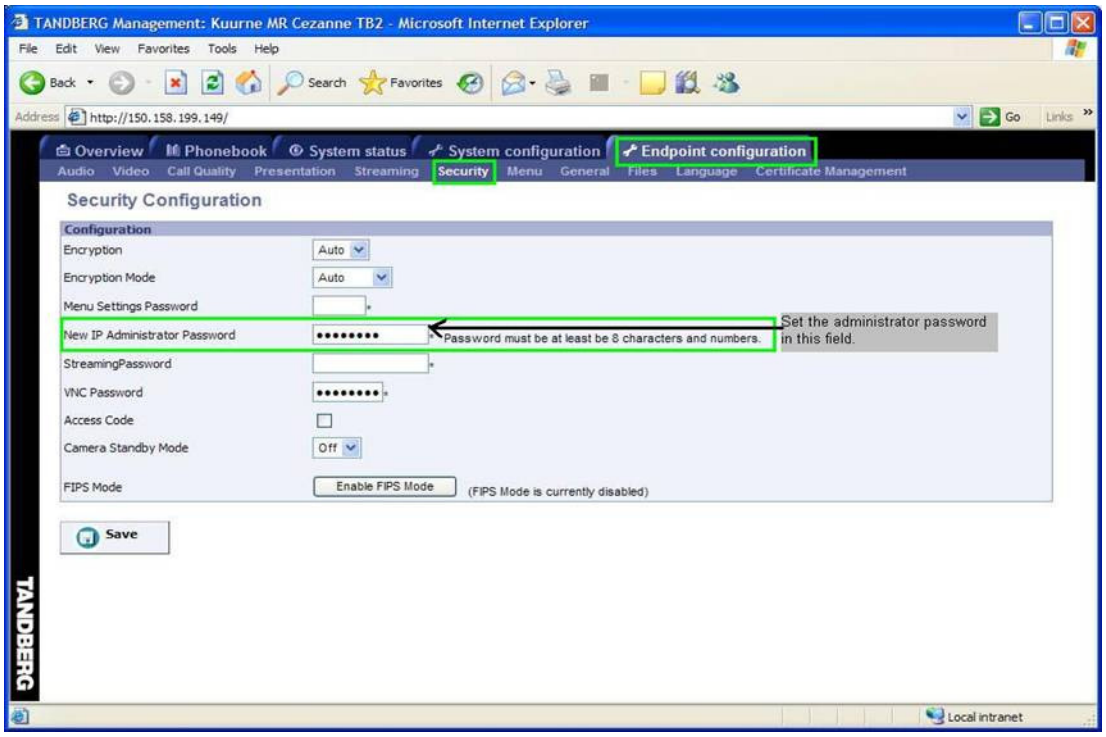
TANDBERG Management: Kuurne MR Cezanne TB2 - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://150.158.199.149/
Go Links
Overview Phonebook System status System configuration Endpoint configuration
Audio Video Call Quality Presentation Streaming Security Menu General Files Language Certificate Management
Security Configuration
Configuration
Encryption Auto
Encryption Mode Auto
Menu Settings Password
New IP Administrator Password
Password must be at least be 8 characters and numbers.
Set the administrator password in this field.
StreamingPassword
VNC Password
Access Code
Camera Standby Mode Off
FIPS Mode
Enable FIPS Mode
(FIPS Mode is currently disabled)
Save
TANDBERG
Local intranet

Image E-2
Tandberg MXP6000: set the Password

5. Click the *Security* menu
6. Enter the new password in *New IP Administrator Password*
   ***Note:*** *This password must be the same as the password entered during the configuration of the Video Conference system in the XDS CC software!*

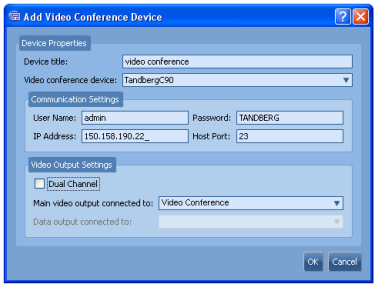


*Image E-3*

7. Click *Save*

**The Video Conference system password can also be changed using the On Screen Display of it. See the concerning manual.**

## E.2 Tandberg C60/C90

### E.2.1 Checking communication with the Video Conference system

#### How to check communication using the PING command?

1. On the Desktop generating PC go to *Start* > *Run* and type `cmd`
2. Enter the following command: `ping <IP-address/Hostname>`, where the IP address or the Hostname of the Video Conference system is used

   Example: `ping 150.158.197.22`
3. Hit **ENTER**

   A reply should be received. If not, check the network connections and configuration.

### How to check communication using a telnet session?

1. On the Desktop generating PC go to *Start* > *Run* and type `cmd`
2. Enter the following command: `telnet <IP-address/Hostname>`, where the IP address or the Hostname of the Video Conference system is used

   Example: `telnet 150.158.197.22`
3. Hit **ENTER**

   You should get a prompt asking you to log in.
4. Enter *Login* and *Password* to ensure that you have the correct credentials
   ***Tip:*** *By default, in a Tandberg C60/C90 system the login and the password are respectively* ***admin*** *and* ***TANDBERG***

### How to check communication using Internet Explorer?

1. On the Desktop generating PC, open Internet Explorer
2. In the address bar, type `http://<IP-address/Hostname>`, where the IP address or the Hostname of the Video Conference system is used

   Example: `http://150.158.197.22`
3. Click *Go*

   A web page, showing the web interface of the Video Conference system should open

## E.2.2 Enabling the required services

### How to enable the required services?

1. On the Desktop generating PC, open Internet Explorer
2. In the address bar, type `http://<IP-address/Hostname>`, where the IP address or the Hostname of the Video Conference system is used

   Example: `http://150.158.197.22`
3. Click *Go*

   A web page, showing the web interface of the Video Conference system opens
4. Click the *Advanced Configuration* page

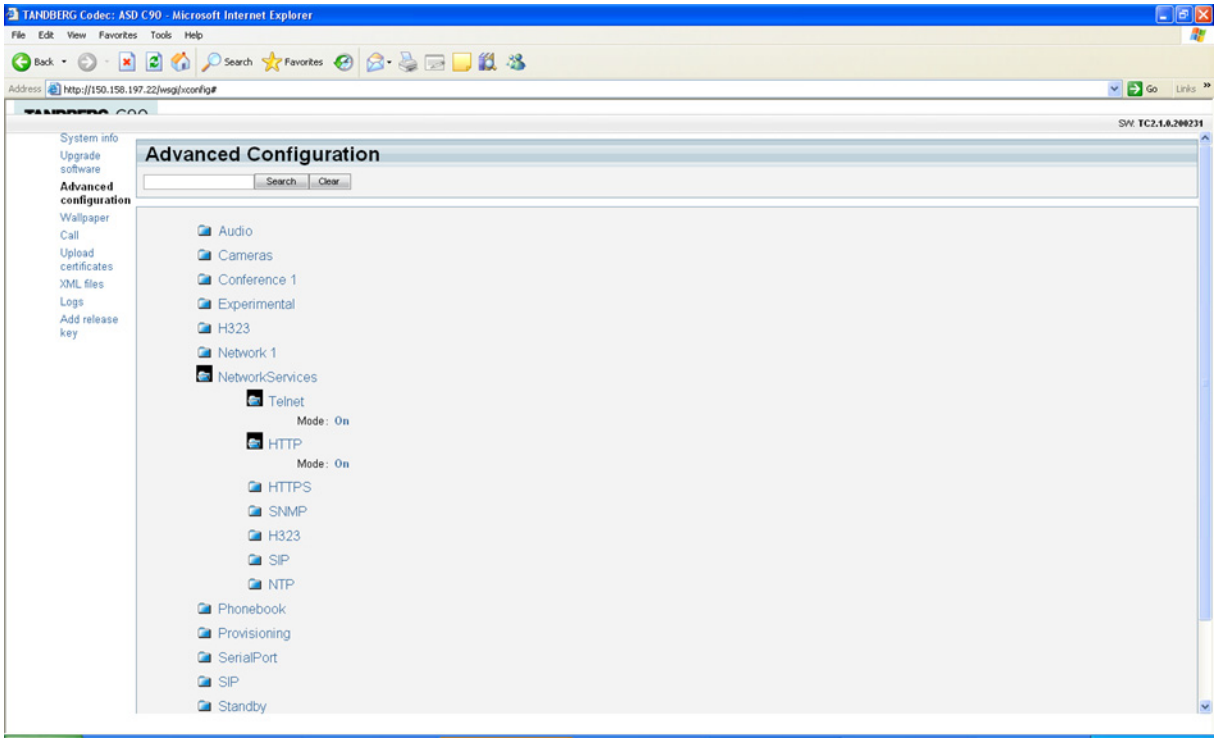


Image E-4
Tandberg C60/C90: enable services

5. Click the *Network Services* entry
6. Enable **Telnet** and **HTTP** services I they are not already enabled

7. Save changes
8. Restart the Video Conference system

# F. AUDIO SWITCHER

## About this chapter

An audio switcher can be connected to and controlled by the XDS CC software. To get the audio switcher up and running, the procedures in the concerning manual must be followed. To connect it and control it by XDS CC software it must be configured as described in the XDS CC user manual and reference guide..

We have encountered however that some settings are critical to ensure good operation with XDS CC software.

This chapter describes the configuration of the Nexia PM as it should be to enable good interaction with XDS CC software and contains the following information:

- Connecting to the Nexia PM
- Checking that the default PM program is loaded
- Checking the InstanceIDs
- Uploading the Default Configuration DL4618.nex as received from Barco to the Nexia PM

**CAUTION: Read the dedicated documentation of the audio switcher for details!**

## F.1 Configuring the Biamp Nexia PM

### How to connect to the Biamp Nexia PM?

1. Install the Nexia configuration software on a laptop or computer
2. Connect the laptop/computer to the Nexia PM using a cross-type Ethernet cable
3. Set the laptop/computer to a fixed IP address within the range of the IP address of the Nexia PM
   ***Note:*** *See the Quickstart guide of the NEXIA PM for more details.*
4. Click the **Connect to Network** button

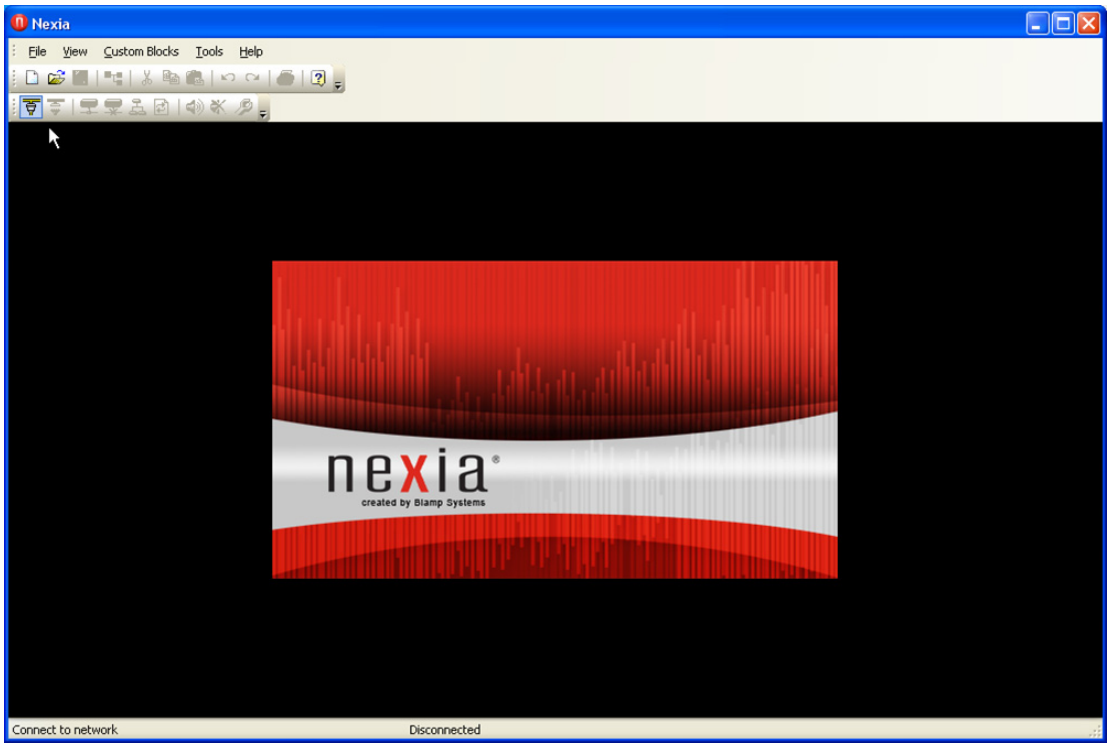


Image F-1
Nexia: connect to network

5. Select the Nexia PM from the list

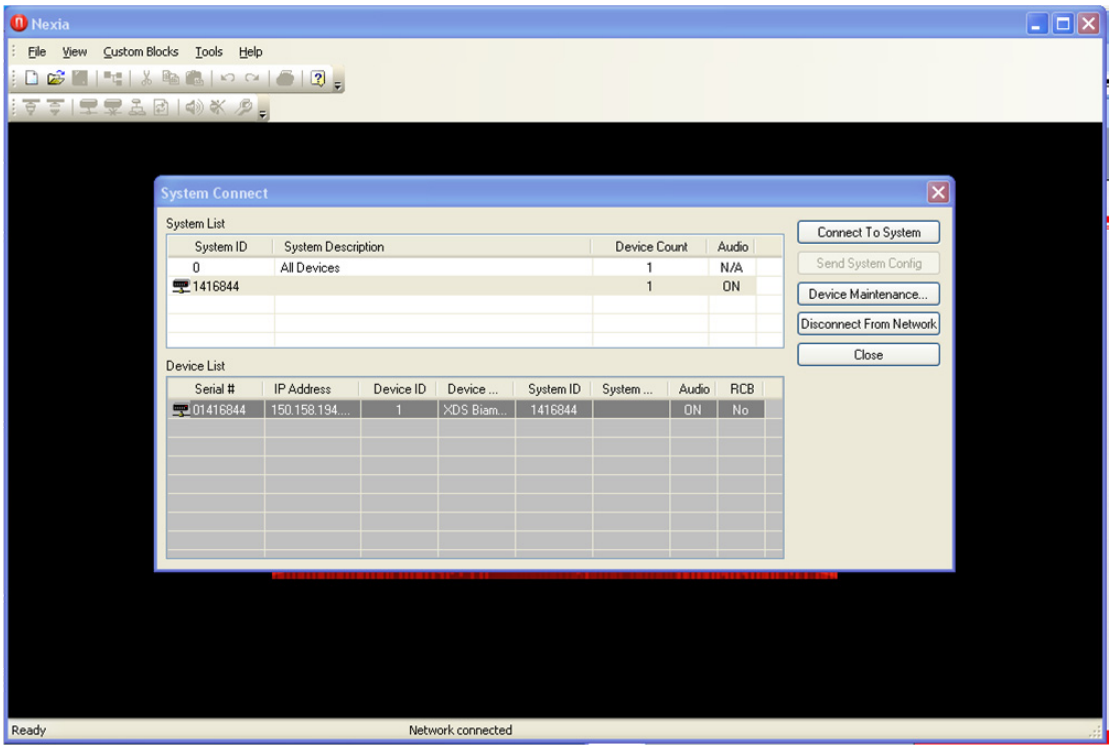


Image F-2
Nexia: select from the list

6. Click *Device Maintenance...*

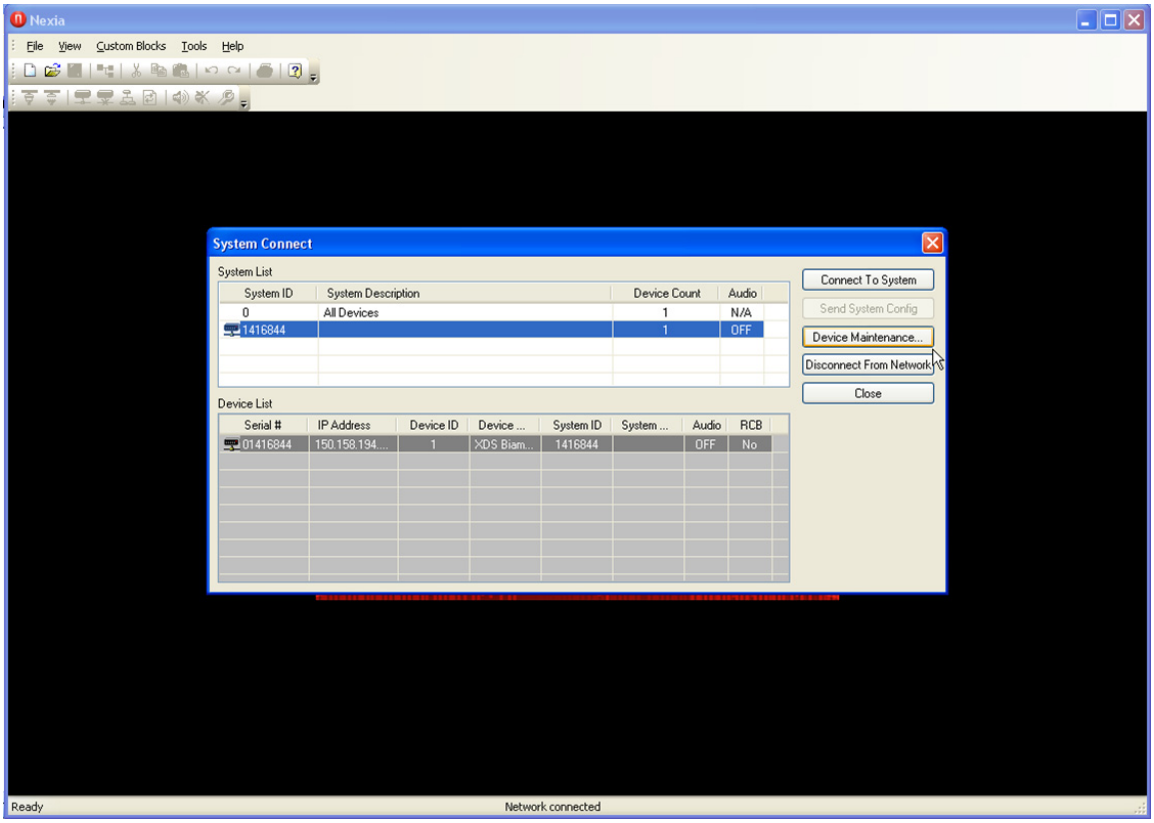


Image F-3
Nexia: Device Maintenance...

7. Click *Set IP Address...*

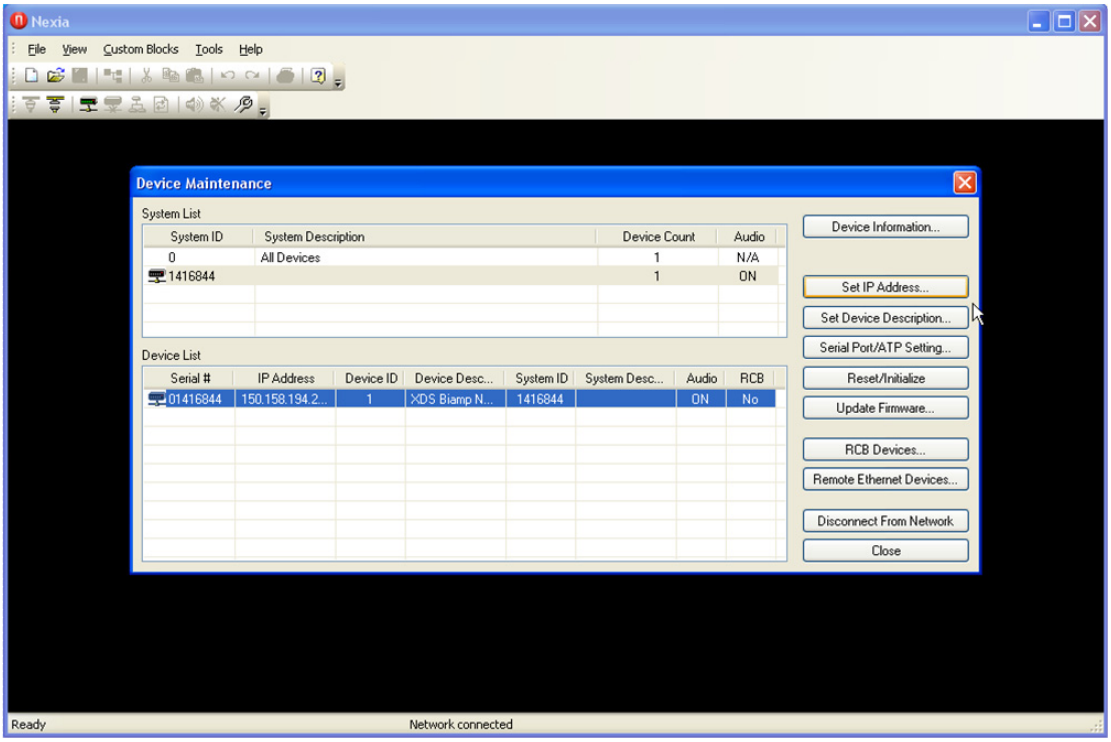


Image F-4
Nexia: set IP address

8. Enter the desired IP address and follow the instructions on the screen

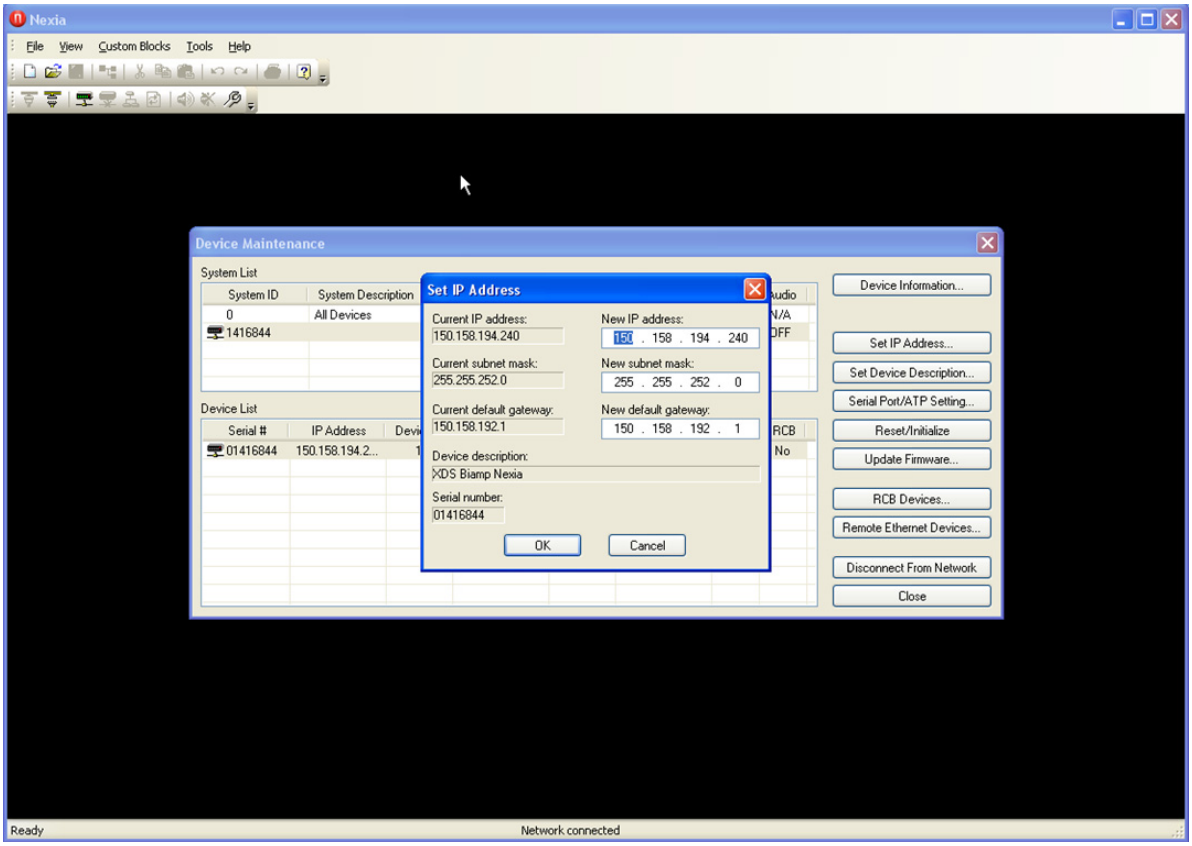


Image F-5
Nexia: enter the IP address

9. Reconnect to the Nexia PM

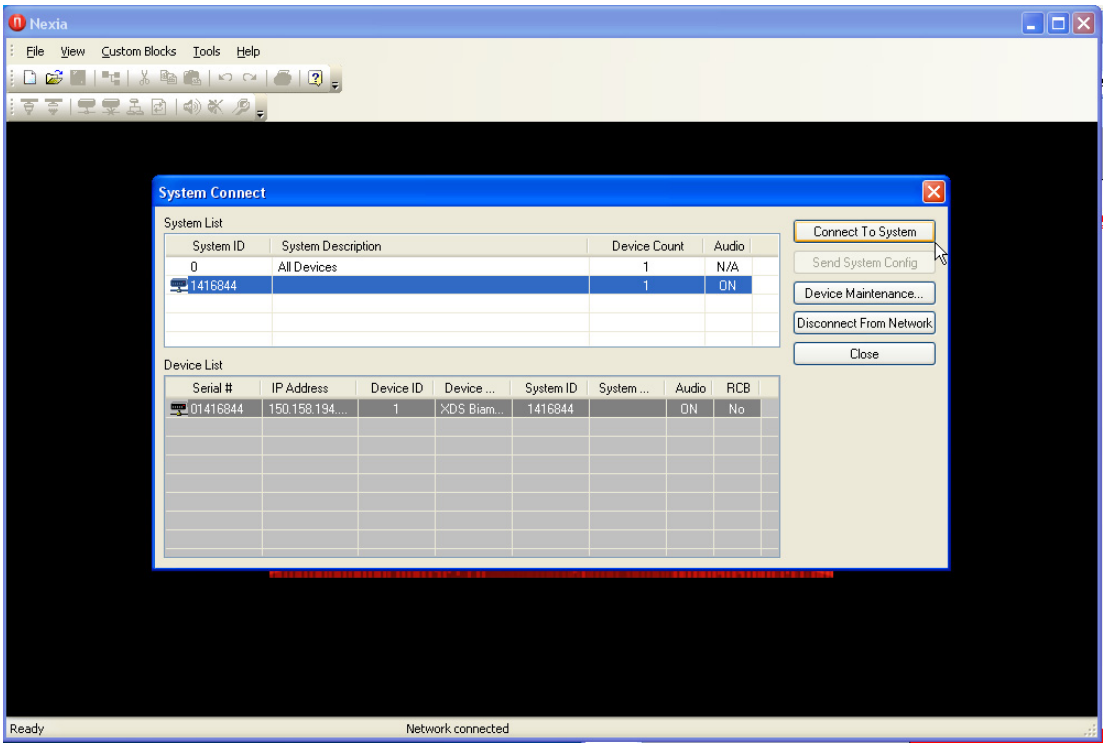


Image F-6

## How to check if the default Nexia PM program is loaded?

1. Connect to the Nexia PM
2. Check the Configuration

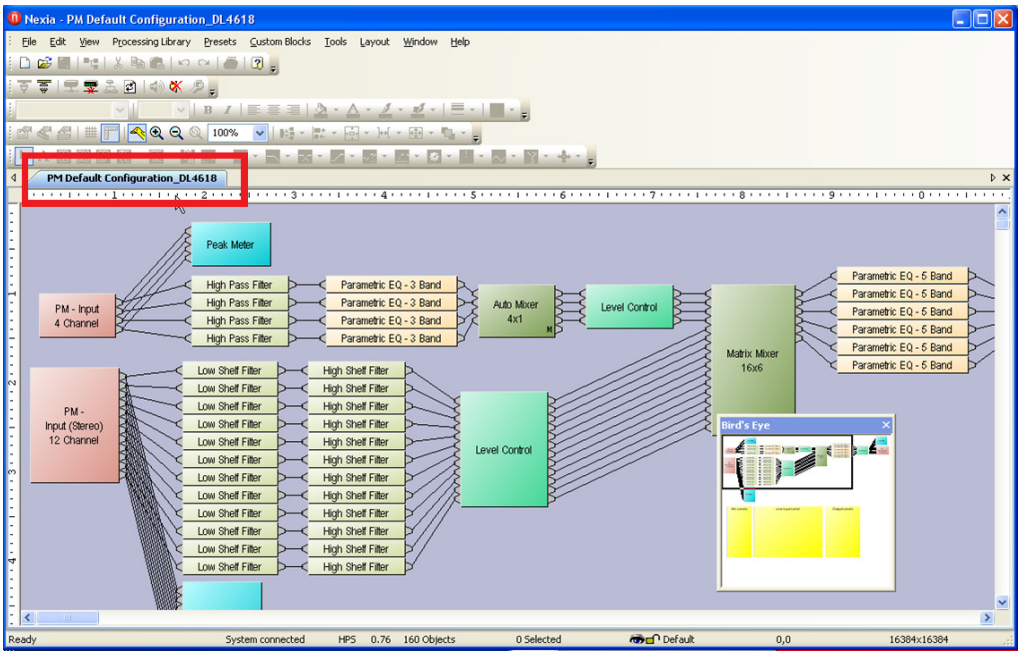


Image F-7
Nexia: Default configuration

## How to check the processing blocks which are used by XDS CC software?

This procedures shows how you can check if the critical processing blocks in the default configuration are set in a correct way. If the settings are different, load the **Nexia PM Default Configuration DL4618.nex** as received from Barco.

1. Microphone Input Preamp: InstanceID must be **102**

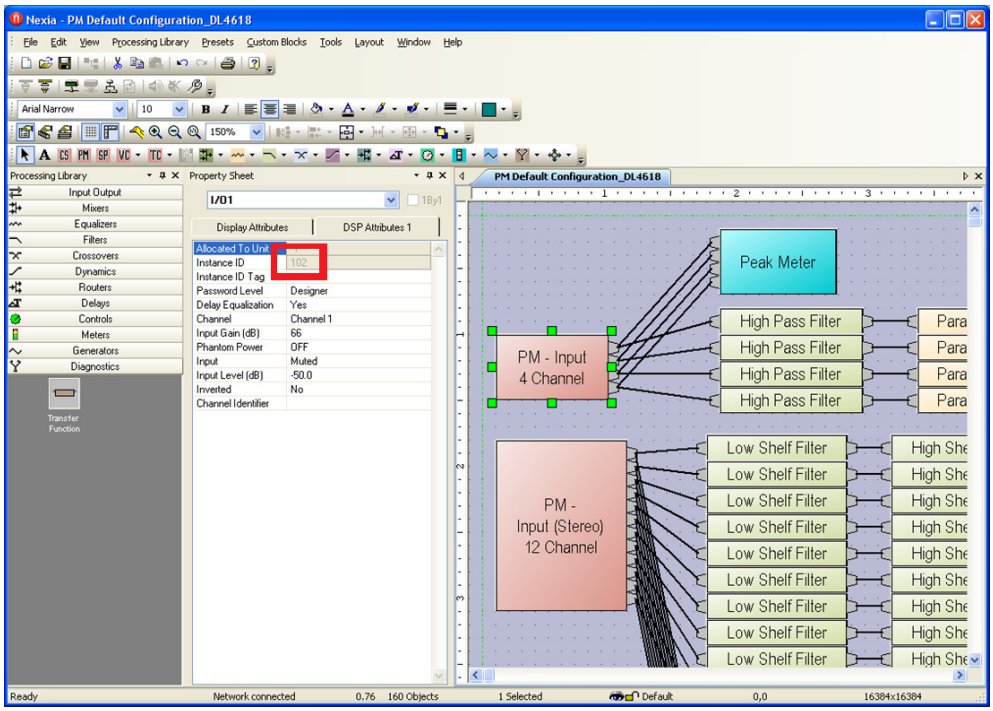
Nexia - PM Default Configuration_DL4618
Peak Meter
High Pass Filter
PM - Input 4 Channel
PM - Input (Stereo) 12 Channel
Low Shelf Filter

Image F-8
Nexia: 4 Channel Microphone Input

2. Microphone Level Control: InstanceID must be **108**

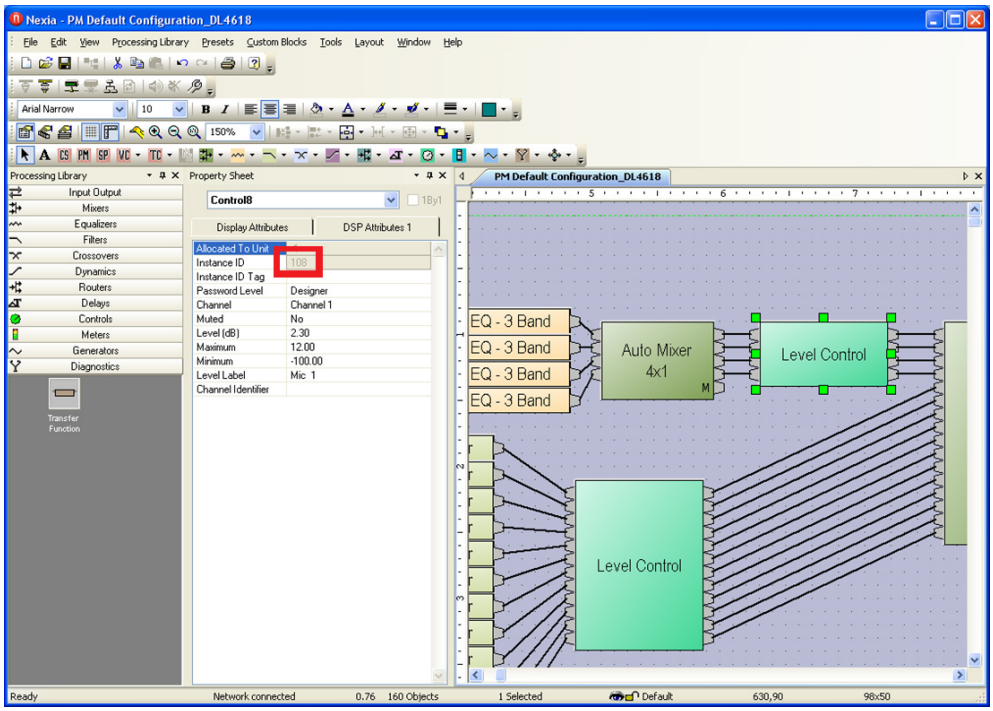


Image F-9
Nexia: Microphone Level Control

3. Line Input Level Control: InstanceID must be **110**

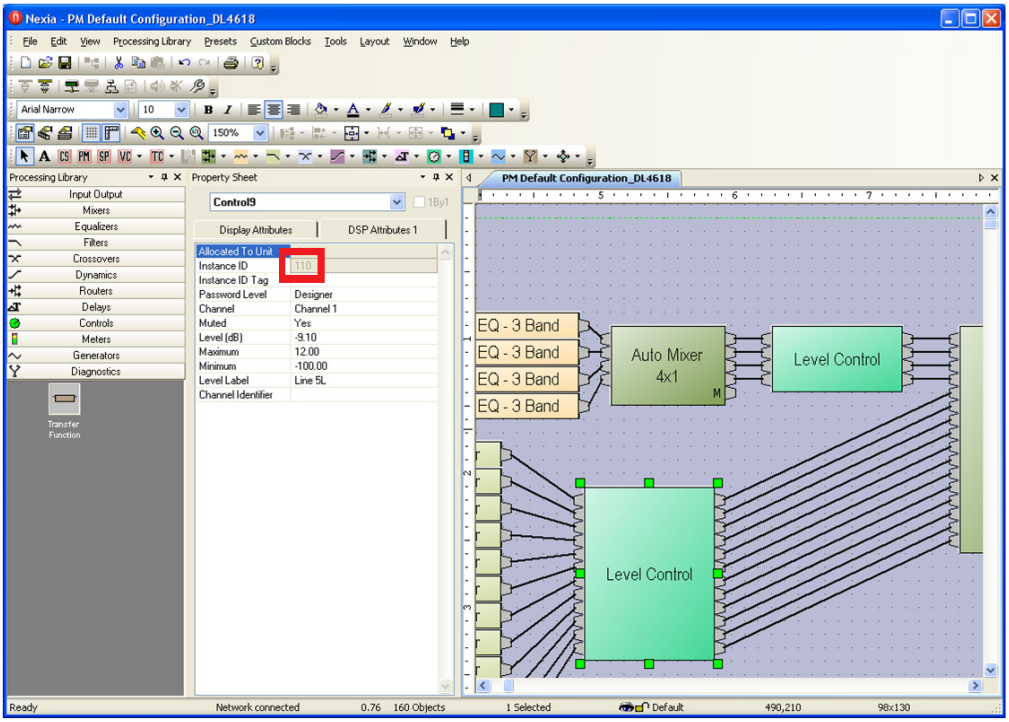


Image F-10
Nexia: Line Input Level Control

4. Output Level Control: InstanceID must be **107**

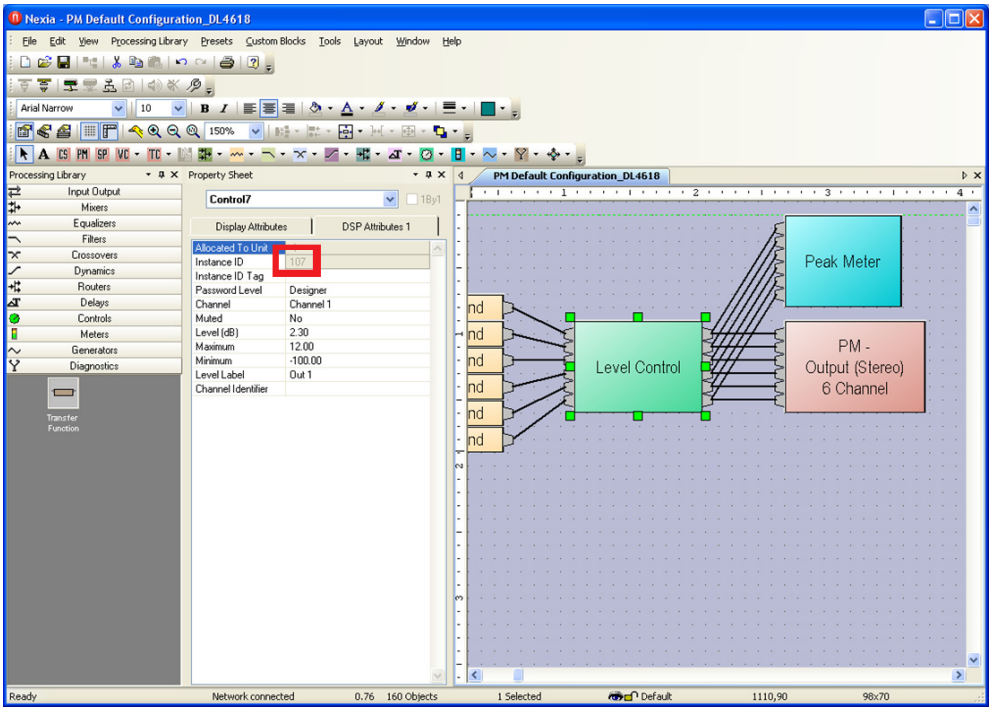


Image F-11
Nexia: Output Level Control

## How to activate the audio processing?

1. Make sure the correct configuration is loaded into the Nexia PM (see previous steps to check)
2. Click the *Start Audio* button

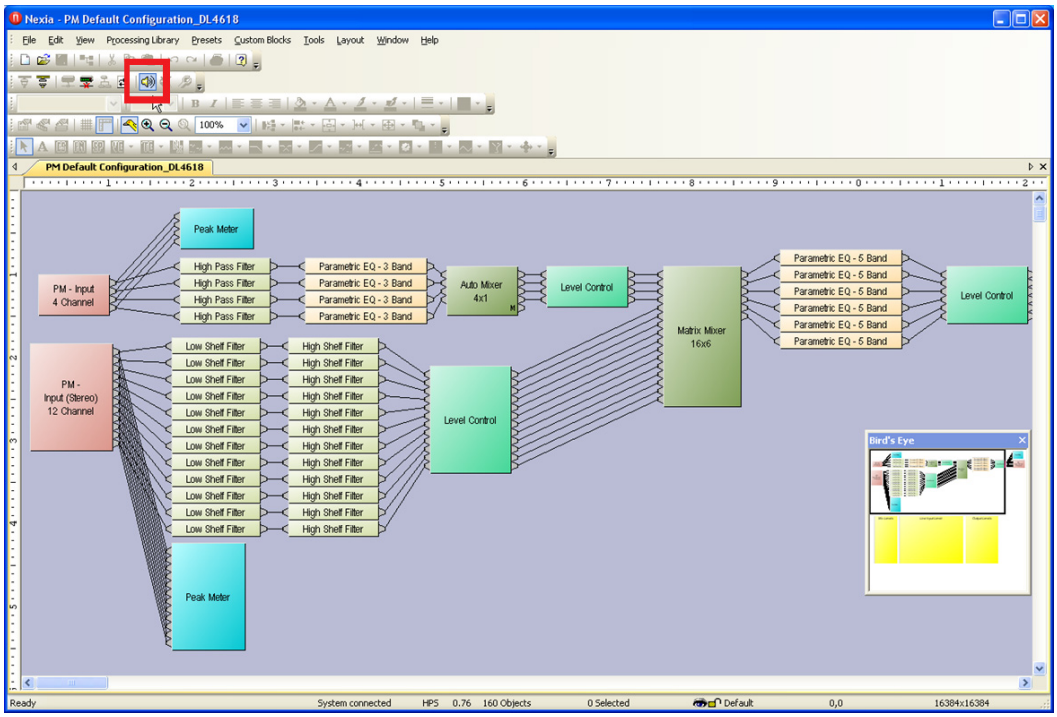


Image F-12
Nexia: Start Audio

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